GROUNDWATER MONITORING REPORT SECOND QUARTER 2005

More for Less Store #21 940 Petrified Forest Road Calistoga, California

Submitted to:

Napa County Department of Environmental Management Napa, California

On behalf of:

Convenience Acquisition Company LLC Sacramento, California

Prepared by:

ENVIRON International Corporation Emeryville, California

July 15, 2005 Project No. 03-10605M



July 15, 2005

Mr. Bob Matthews Convenience Acquisition Company LLC 3336 Bradshaw Road, Suite 260 Sacramento, California 95827

Re: Groundwater Monitoring Report, Second Quarter 2005

More For Less Store #21; Calistoga, California

ENVIRON Project No. 03-10605M

Dear Mr. Matthews:

ENVIRON International Corporation ("ENVIRON") is pleased to present this report summarizing the results of groundwater monitoring conducted at Convenience Acquisition Company's More for Less Store #21 located at 940 Petrified Forest Road in Calistoga, California (Figure 1). The report has been prepared in response to a request from the Napa County Department of Environmental Management (DEM) as specified in a letter dated January 20, 2005 addressed to both More for Less and The Customer Company, the previous owner of the site.

The approximately one-acre site consists of a convenience store building, three fuel islands, and associated underground storage tanks, as shown on Figure 2. Convenience Acquisition Company, the current site owner, has operated the More for Less Gas Station and Convenience Store at the site since July 1998. There are five active underground storage tanks (USTs) located in the central portion of the site, including three 12,000-gallon gasoline USTs, one 8,000-gallon diesel UST, and one 520-gallon waste oil UST. Two former USTs for storage of fuels and an associated fuel island were located in the northern corner of the site and removed in 1988 by the previous owner.

This report presents a summary of the site history, subsurface conditions, and groundwater monitoring results for May 2005. A summary of monitoring well construction details is presented in Table 1. The locations of groundwater monitoring wells discussed in this report are shown on Figure 3. Laboratory analytical results for groundwater samples collected during the quarterly monitoring event in February 2005 are in Appendices B and C.

As required by California Underground Storage Tank regulations (CCR Title 23, Section 2729), a site plan and data collected since September 1, 2001, including analytical data, monitoring well survey data, and groundwater level data, have been submitted in Electronic Deliverable Format (EDF) to the California State Water Resources Control Board (SWRQB) Geotracker database.

Background

Prior to purchase by Convenience Acquisition Company, the site was operated as Food and Liquor #168 by The Customer Company. Two former 12,000-gallon USTs located in the northern corner of the site were removed in February 1988 (Kleinfelder 1988). Based on the detection of fuel hydrocarbons in a water sample collected during the tank removal, the Napa County DEM requested that additional site investigation be conducted. In December 1989, three groundwater monitoring wells (MW-1, MW-2 and MW-3) were installed in the vicinity of the former tanks (Dames & Moore 1990). The three wells were sampled in December 1989, and downgradient well MW-3 was sampled again in January 1991. The groundwater samples were tested for total petroleum hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and xylenes (BTEX). None of these compounds were detected. Based on these results, the Napa County DEM recommended that the case be closed, and the San Francisco Regional Water Quality Control Board issued a case closure letter dated March 5, 1991.

In July 1998, Convenience Acquisition Company purchased the site from The Customer Company, and the store was renamed More for Less #21. The fuel dispensers and underground fuel delivery lines to the four existing USTs at the site were upgraded during February 2000. During the upgrade activities, Geocon Consultants Inc. (Geocon) of Rancho Cordova, California collected soil samples from the delivery line trench and dispenser island excavations in accordance with a request from the Napa County DEM. TPH-diesel was detected in all ten soil samples collected and the gasoline oxygenate methyl-tert-butyl ether (MTBE) was detected in nine of the ten soil samples collected. TPH-gasoline and BTEX compounds were detected in two or three of the shallow soil samples (Geocon Consultants, Inc. 2000).

Following submittal of Geocon's report dated March 27, 2000, the Napa County DEM issued a letter to Convenience Acquisition Company dated March 29, 2000 requesting that a soil and groundwater investigation be conducted to address the possible release of MTBE at the site. A workplan for a soil and groundwater investigation was prepared by Parker Environmental Services of Pittsburg, California on June 21, 2000 and submitted to the Napa County DEM. Following approval of the workplan by the Napa County DEM in a letter dated October 10, 2000, the plan was implemented in November 2001 by H₂O Geol of Livermore, California.

The investigation at the site in November 2001 included the installation and development of three new shallow monitoring wells (MW-4, MW-5, and MW-6) and collection of two soil samples from each well boring for chemical analysis. Groundwater levels were measured in all six onsite monitoring wells, and groundwater samples were collected for chemical analysis.

Soil and groundwater samples were analyzed for TPH as gasoline and diesel, BTEX compounds, MTBE, and other fuel oxygenates. Additional quarterly groundwater monitoring events for all six wells were conducted in March 2002 by H₂O Geol and on a quarterly basis since August 2002 by ENVIRON. Results of these previous investigations were summarized in the *Site Investigation and Groundwater Monitoring Report* (ENVIRON 2002a) and subsequent groundwater monitoring reports (ENVIRON 2002 through 2005).

Site Subsurface Conditions

In general, the site is underlain by fill over natural alluvial soils. Where present, the fill material is described as pea gravel or engineered fill containing concrete, brick, and wire fragments to a depth ranging from approximately 9 to 10.5 feet below ground surface (bgs). Fill was not reported along the northern side of the site at locations MW-1 and MW-3, where the first soil encountered consisted of silty clay to depths of 6-7 feet bgs. The fill material is underlain by relatively fine-grained deposits consisting of clayey to gravelly silt and silty to gravelly clay extending to depths ranging from approximately 13 to 18 feet bgs. These deposits are underlain by relatively coarse-grained alluvial deposits consisting of sand and gravel. Groundwater elevations fluctuate seasonally. The direction of groundwater flow is toward the southeast, and the depth to water typically ranges between about 7 to 21 feet below ground surface.

Well Survey Results

All six monitoring wells at the site were surveyed on February 21, 2002 by Renner Surveying and Engineering of Burlingame, California. This survey was conducted relative to a benchmark established at the site with an assumed elevation of 390.00 feet. Wells MW-1, MW-2 and MW-3 were also surveyed following their installation in 1989 by Earl L. Gray of Pleasant Hill, California using a Napa County benchmark identified as BM No. 325 referenced to Mean Sea Level (MSL) datum. The difference between the two surveys is shown below:

	Feet,	Feet, 2002	Difference
Well	MSL Datum	Site Datum	in feet
MW-1	391.90	388.59	3.31
MW-2	392.28	388.99	3.29
MW-3	391.71	388.46	3.25

The average difference between the site datum elevations measured in 2002 and the MSL datum elevations measured in 1989 for these three wells is 3.28 feet. These data indicate that a correction factor of +3.3 feet could be used to convert the elevations based on the site benchmark to approximate MSL datum elevations, if necessary. However, the 2002 elevations measured relative to the site benchmark are consistent relative to one another and can be used to assess groundwater flow directions and gradient at the site.

During the sampling event on May 15, 2003, it was observed that a concrete sidewalk had been added surrounding the MW-3 well box, the top of which is flush with the new sidewalk. Upon inspection of the well by ENVIRON, the casing appeared to have been newly cut, presumably so that the well box lid could be placed flush with the sidewalk. Renner Surveying and Engineering of Burlingame, California surveyed the elevation of MW-3 on October 17, 2003. This survey was conducted relative to a benchmark established at the site with an assumed elevation of 390.00 feet. The new elevation for MW-3 was measured at 388.29 feet, site datum.

Groundwater Occurrence

Static groundwater levels were measured on May 26, 2005 using an electronic water level probe. The groundwater level measurements are presented along with historic data in Table 2. In general, measured water levels were found to be between depths of 7.55 and 9.19 feet. Water levels were approximately 0.4 feet lower in May 2005 than those recorded in February 2005. The groundwater levels measured in May 2005 are shown on a groundwater table contour map on Figure 4. Consistent with previous quarters, the measured water levels indicate an overall groundwater flow direction toward the east/southeast. Cyrus Creek, which is located about 50 feet south of the site, is dry for much of the year, indicating that groundwater is deeper than the creek bed, and that the creek acts as a discharging stream when it flows during the rainy season. As a result, the potential for groundwater discharge into the creek is very low.

Chemical Testing Results

To characterize current groundwater conditions at the site, ENVIRON collected groundwater samples as part of a quarterly monitoring event conducted in May 2005. Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6. The groundwater samples were analyzed for TPH as gasoline and diesel, BTEX compounds, and fuel oxygenates. The results of groundwater analyses are summarized in Table 3, and concentrations of MTBE in groundwater are shown on Figure 5. The field parameter sheets are presented in Appendix A, and the analytical laboratory reports are attached in Appendix B. No fuel constituents were detected in any of the groundwater samples collected in May 2005.

As part of the quality control program, an equipment rinsate blank sample was collected and analyzed to evaluate potential bias introduced to the sample during decontamination procedures, sample collection, and analysis. The equipment blank sample was analyzed for the same constituents as the groundwater samples. None of the constituents were detected in the equipment blank sample.

Comparison with Historical Results

Groundwater analytical results have been compared to available federal and California criteria for the chemicals detected. Available water quality criteria include health based Maximum Contaminant Levels (MCLs) for drinking water, and Secondary MCLs based on aesthetic

factors such as color, taste, and odor. Although groundwater at the site is not used for drinking water, drinking water criteria are identified as water quality objectives for groundwater by the California Regional Water Quality Control Board.

Groundwater monitoring results since November 2001 are shown in Table 3, and MTBE results are presented on Figure 5. The historical data indicate that MTBE concentrations at the site were highly variable during the period from November 2001 through November 2002. The highest concentrations were detected in the two November rounds of sampling (up to $26,400 \mu g/l$), and the lowest concentrations were detected in March 2002 (<0.50 to 2.7 $\mu g/l$).

As of January 9, 2003, the gasoline delivered to facility contains ethanol rather than MTBE. Since then, MTBE has not been detected in wells MW-1, MW-2, and MW-3 located in the northern portion of the site. Wells MW-4, MW-5, and MW-6 are located in the southern portion of the site. In wells MW-4 and MW-5, MTBE results have been either not detected or below MCLs except in the November 2003 round of sampling. The same pattern is observed in well MW-6, with one exception (in May 2004, MTBE was detected at 15.9 μg/l). In November 2003, MTBE was detected above MCLs in wells MW-4, MW-5, and MW-6, but the concentrations were one to two orders of magnitude lower than in November 2001 and November 2002. Other fuel constituents, including TPH-gasoline, benzene, TBA, and TAME, were also detected in one or more wells during November 2003. By November 2004, MTBE and other fuel constituent detections were below MCLs. Ethanol has never been detected in any of the site wells.

The pattern of higher MTBE and other fuel constituent detections in the November rounds of sampling from 2001 to 2003 appears to be related to rising water levels after the start of the rainy season. During the dry season, the groundwater table is about 20 feet deep and occurs in an alluvial sand and gravel layer. This coarse-grained soil unit is overlain by fine-grained silt and clay. Following rain events in the fall, the water table rises high enough to contact the base of the fine-grained soil unit at a depth of about 14 to 15 feet bgs in the southern portion of the site. The detections of MTBE and other fuel constituents in the previous November rounds of sampling suggest that there may be residual fuel constituents in soil pore space at the base of the fine-grained layer. Based on the fourteen rounds of sampling since November 2001, the residual MTBE concentrations appear to be decreasing over time and were below MCLs in November 2004. In the subsequent February 2005 and May 2005 rounds of sampling, MTBE was not detected at the site.

Offsite Irrigation Well

At the request of the Napa County DEM, a groundwater sample was collected from the offsite irrigation well located on the Rancho de Calistoga property across Highway 128 southeast of the site. The approximate well location is shown on Figure 3. According to Mr. Jerry Sturr, the former manager of the property, the well is approximately 276 feet deep and is used solely for landscape irrigation.

A groundwater sample was collected from a tap on the well outlet line on May 26, 2005. The sample was analyzed for TPH as gasoline and diesel, BTEX compounds, and fuel oxygenates. None of the analyzed constituents were detected in the sample. The analytical laboratory report is presented in Appendix C.

The offsite irrigation well was sampled previously in conjunction with eight monitoring events (August 2002 and each quarterly monitoring event since August 2003) and tested for the same fuel constituents. Fuel constituents were not detected in samples collected in August 2002 and August 2003. In November 2003, MTBE was detected at a concentration of 6 μ g/l; no other compounds were detected. The primary MCL for MTBE is 13 μ g/l, and the secondary MCL (based on taste and odor factors) is 5 μ g/l. To confirm this result, the well was resampled in December 2003. MTBE was detected, but only at 1.1 μ g/l, well below both the primary and secondary MCLs.

Fuel constituents were not detected in samples collected in February and May 2004. In August 2004, TPH-gasoline was reported at a concentration of 74 μ g/l, and total xylenes were reported at 1.3 μ g/l. In order to confirm the August 2004 results, the well was sampled again on September 19, 2004 and analyzed for TPH-gasoline and BTEX. An atmospheric blank sample was also collected and analyzed for the same parameters. TPH-gasoline and BTEX were not detected in the sample from the well or in the atmospheric blank sample. Therefore, the reported detections in the August sample are considered suspect. Fuel constituents have not been detected in any of the subsequent samples collected in November 2004, February 2005, and May 2005.

Summary

Based on data from fourteen groundwater monitoring events, concentrations of MTBE in groundwater were highly variable during the period between November 2001 and November 2002. Relatively high concentrations were reported in both November 2001 and November 2002. However, in March 2002 (highest groundwater elevation) and August 2002 (lowest groundwater elevation), MTBE was not detected or was reported at relatively low concentrations. The absence of TPH-gasoline, BTEX, and other fuel oxygenates at more than sporadic and/or low levels did not indicate a liquid fuel release at the site. However, the source(s) of the MTBE in groundwater is not clear. In accordance with its permit, the facility fuel system integrity was tested in 2002, 2003, 2004, and 2005, and all fuel system components passed. The most recent testing included pressure decay testing of the gasoline USTs, air to liquid ratio performance of the dispenser nozzles, and testing of the product lines conducted by Tank-Tek on May 5, 2005, with a follow up test on July 11, 2005 after a faulty sensor was replaced.

Any potential onsite sources of MTBE were eliminated in January 2003. Since that time, the gasoline delivered to the facility has been formulated with ethanol rather than MTBE. In the first three monitoring events of 2003 (February 2003, May 2003, and August 2003), MTBE was not detected or was reported at low concentrations below MCLs. In November 2003,

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MTBE was detected in the three site wells near the current USTs but at concentrations an order of magnitude lower than in November 2001 and November 2002. MTBE was not detected in the three wells near the former USTs. In the monitoring events of 2004 (including the November sampling), MTBE was again not detected or reported at low concentrations below MCLs, with only one exception (one May 2004 result was slightly above the primary MCL). In February 2005 and May 2005, MTBE was not detected in any of the site wells. Ethanol has never been detected in any of the site wells.

The pattern of higher MTBE and other minor fuel constituent detections in the previous November rounds of sampling appears to have been related to rising water levels after the start of the rainy season. During the dry season, the groundwater table is about 20 feet deep and occurs in an alluvial sand and gravel layer. Following rain events in the fall, the water table rises high enough to contact the base of a fine-grained soil unit at a depth of about 14 to 15 feet bgs in the southern portion of the site. The detections of MTBE and other fuel constituents in the November rounds of sampling suggest that there may have been residual fuel constituents in soil pore space at the base of the fine-grained layer. Based on the fourteen rounds of sampling since November 2001, the residual MTBE concentrations appear to be decreasing over time. By November 2004, MTBE and other fuel constituent detections were below MCLs, and current groundwater concentrations are below the detection limit.

As discussed above, based on sampling conducted in August 2002 and August 2003, an offsite irrigation well located approximately 160 feet downgradient of the site was not impacted by fuel constituents. Data from two samples collected in November and December 2003 indicated very low concentrations of MTBE below MCLs. However, MTBE and other fuel constituents were not detected in more recent samples from February, May, and November 2004, or February and May 2005. Low concentrations of TPH-gasoline and xylenes were reported for a sample collected in August 2004 (MTBE and other fuel constituents were not detected). These positive detections were not confirmed by a second sample collected in September 2004 and are therefore considered to be suspect.

In accordance with a Napa County DEM letter dated January 20, 2005, we recommend that an additional round of quarterly monitoring be conducted during Third Quarter (August) 2005 to further evaluate site conditions following the removal of MTBE-containing gasoline from the facility. Because the gasoline delivered to the facility now contains ethanol rather than MTBE, a reporting limit of $50 \mu g/l$ will be requested from the analytical laboratory. The offsite irrigation well located at the Rancho de Calistoga property will also be sampled again in August 2005. In addition, additional groundwater sampling and analysis will be performed in November 2005 in accordance with the work plan prepared by ENVIRON and submitted to the Napa County DEM on March 11, 2005 (ENVIRON 2005b), as approved by the agency in a letter dated March 15, 2005.

Please contact us at (510) 655-7400 if you have any questions about this report.

Very truly yours,

John Pekala, P.G. No. 7248 Manager

Jessica E. Donovan, P.G. No. 3791 Principal

cc: Mr. John Johnson, The Customer Company Mr. Gary Lowe, H2O Geol

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TABLE 1. SUMMARY OF MONITORING WELL CONSTRUCTION DATA Convenience Acquisition Company, More For Less Store #21 940 Petrified Forest Road; Calistoga, California

		Measuring	Depth					Well Casing			
Well Number	Date Installed	Point Elevation (ft msl)	of Well Elevation (ft sd)	Depth of Well (ft bgs)	Screened Elevation (ft sd)	Screened Interval (ft bgs)	Diameter (inches)	Casing Material	Screen Slot Size	Filter Pack Elevation (ft sd)	Filter Pack Interval (ft bgs)
MW-1	12/18/1989	388.59	368.6	20.0	383.6 to 368.6	5 to 20	4	Sch. 40 PVC	0.02"	385.6 to 368.6	3 to 20.0
MW-2	12/18/1989	388.99	364.0	25.0	379.0 to 364.0	10 to 25	4	Sch. 40 PVC	0.02"	381.0 to 364.0	8 to 25.0
MW-3	12/18/1989	388.29	368.5	20.0	383.5 to 368.5	5 to 20	4	Sch. 40 PVC	0.02"	385.5 to 368.5	3 to 20.0
MW-4	11/13/2001	388.54	364.1	24.4	374.5 to 364.5	14 to 24	2	Sch. 40 PVC	0.02"	375.5 to 364.1	13 to 24.4
MW-5	11/13/2001	388.10	364.1	24.0	374.1 to 364.1	14 to 24	2	Sch. 40 PVC	0.02"	375.1 to 364.1	13 to 24.0
MW-6	11/13/2001	387.96	363.7	24.3	374.0 to 364.0	14 to 24	2	Sch. 40 PVC	0.02"	375.0 to 363.7	13 to 24.3

NOTES:

ft bgs = feet below ground surface

ft sd = feet, 2002 site datum (see Table 2 for explanation)

PVC = polyvinyl chloride

Site Datum:

Well elevations are based on surveys by Renner Surveying & Engineering conducted in February 2002 and November 2003. These surveys were conducted relative to a temporary benchmark point at the site with an assumed elevation of 390.00 feet. Based on a 1989 survey of wells MW-1 through MW-3 by Earl L. Gray of Pleasant Hill, California using Napa County benchmark No. 325, a correction factor of +3.3 feet should be used to convert the elevations based on the 2002 site benchmark to elevation based on Mean Sea Level datum.

TABLE 2. SUMMARY OF GROUNDWATER ELEVATIONS
Convenience Acquisition Company, More for Less Store #21
940 Petrified Forest Road; Calistoga, California

Well ID	M	W-1	М	W-2	М	W-3	М	W-4	М	W-5	М	W-6
тос	38	8.59	38	8.99	388	3.29 ^(a)	38	8.54	38	8.10	38	7.96
	Depth	Elevation	Depth	Elevation	Depth	Elevation	Depth	Elevation	Depth	Elevation	Depth	Elevation
Date	(ft)	(ft sd)	(ft)	(ft sd)	(ft)	(ft sd)	(ft)	(ft sd)	(ft)	(ft sd)	(ft)	(ft sd)
12/29/1999	13.33	375.26	13.54	375.45	13.38	375.08						
11/19/2001	11.80	376.79	11.90	377.09	11.95	376.51	11.77	376.77	11.16	376.94	10.90	377.06
3/28/2002	9.35	379.24	8.75	380.24	9.25	379.21	8.75	379.79	8.15	379.95	7.80	380.16
8/15/2002	Dry		20.94	368.05	Dry		20.55	367.99	20.12	367.98	19.94	368.02
11/12/2002	11.78	376.81	11.79	377.20	11.92	376.54	11.68	376.86	11.11	376.99	10.79	377.17
2/24/2003	9.06	379.53	8.11	380.88	8.81	379.65	8.25	380.29	7.63	380.47	7.18	380.78
5/15/2003	9.13	379.46	8.38	380.61	8.88	379.41	8.54	380.00	7.93	380.17	7.44	380.52
8/20/2003	Dry		20.67	368.32	Dry		20.27	368.27	19.84	368.26	19.65	368.31
11/21/2003	15.56	373.03	15.82	373.17	15.46	372.83	15.60	372.94	15.05	373.05	14.85	373.11
2/24/2004	8.63	379.96	7.75	381.24	8.32	379.97	8.09	380.45	7.48	380.62	6.91	381.05
5/27/2004	13.65	374.94	13.89	375.10	13.67	374.62	13.74	374.80	13.23	374.87	12.92	375.04
8/24/2004	Dry		21.15	367.84	Dry		20.8	367.74	20.38	367.72	20.17	367.79
11/19/2004	14.96	373.63	15.18	373.81	14.88	373.41	14.97	373.57	14.50	373.60	14.20	373.76
2/25/2005	8.84	379.75	8.05	380.94	8.55	379.74	8.29	380.25	7.70	380.40	7.12	380.84
5/26/2005	9.19	379.40	8.48	380.51	9.04	379.25	8.72	379.82	8.08	380.02	7.55	380.41
Change*		-0.35		-0.43		-0.49		-0.43		-0.38		-0.43

NOTES:

TOC indicates top of casing elevation in feet, 2002 site datum.

Depth to groundwater is in feet below top of casing.

Groundwater elevation is in feet above 2002 site datum (ft sd).

Site Datum: See Table 1 for explanation.

^{*} Difference between two most recent elevations.

⁽a) The well casing for MW-3 was cut between the February and May 2003 sampling events. Prior to this, groundwater elevations were calculated using the prior surveyed TOC elevation of 388.46 feet, 2002 site datum. Beginning in May 2003, the new surveyed elevation of 388.29 feet, 2002 site datum was used.

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - Fuel Constituents Convenience Acquisition Company, More For Less Store #21 940 Petrified Forest Road; Calistoga, California

Well Name	Screened Interval (ft bgs)	Sample Name	Date	MTBE (µg/L)	TPH- Gasoline (μg/L)	TPH- Diesel (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME	1,2- DCA (μg/L)	EDB (µg/L)	Ethanol
Wells Ir	, ,	r Former Tank Locatio	on (Decemb	,	1107	(10)	W 0 7	40,	(10)	W 0 7	(10)	11 0 7	4 0 7	4 0 7	(10)	(10)	
MW-1	5 - 20	14/168/MW-1	11/19/01	79	<50	<50	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	na
	·	21/168/MW-1	03/28/02	<0.50	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<1.0	<0.50	<0.50	<0.50	<0.50	na
		Dry	08/15/02	~0.50 			~0.50 				~5.0						
		011112-21-MW-1-P	11/12/02	89	<50	<50	0.8	<0.5	<0.5	<1.0	<50	<1	<1	3	<1	<1	<100
	•	030224-21-MW-1-P	02/24/03	<1	<50	<50	<0.5	<0.5	<0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		030515-21-MW-1-P	05/15/03	<1	<50	<50	<0.5	<0.5	<0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		Dry	08/21/03														
		031121-21-MW-1-P	11/21/03	<0.5	142	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1.0	<1.0	<1	<0.5	<100
		040224-21-MW-1-P	02/24/04	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<100
		040527-21-MW-1-P	05/27/04	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50
		Dry	08/24/04														
		041119-21-MW-1-P	11/19/04	<0.5	<50	<50	<0.5	0.6	0.6	2.2	<10	<0.5	<1	<1	<1	<0.5	<50
		050225-21-MW-1-P	02/25/05	<0.5	69	<50	<0.5	<0.5	<0.5	3	<10	<0.5	<1	<1	<1	<0.5	<50
		050526-21-MW-1-P	05/26/05	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50
MW-2	10 - 25	14/168/MW-2	11/19/01	24	<50	<50	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	na
		21/168/MW-2	03/28/02	2.7	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<1.0	<0.50	<0.50	<0.50	<0.50	na
		020815-21-MW-2-P	08/15/02	<1	<50	<50	<0.5	<0.5	<0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		011112-21-MW-2-P	11/12/02	421	<50	<50	5.7	<0.5	<0.5	<1.0	129	<1	<1	17	<1	<1	<100
		030224-21-MW-2-P	02/24/03	<1	<50	<50	<0.5	<0.5	<0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		030515-21-MW-2-P	05/15/03	<1	<50	<50	<0.5	<0.5	<0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		030821-21-MW-2-P	08/21/03	<1	55	<50	<0.5	0.7	<0.5	3 U	<50	<1	<1	<1	<1	<1	<100
		031121-21-MW-2-P	11/21/03	<0.5	92	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1.0	<1.0	<1	<0.5	<100
		040224-21-MW-2-P	02/24/04	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	0.5	<1	<1	<1	<0.5	<100
		040527-21-MW-2-P	05/27/04	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50
		040824-21-MW-2-P	08/24/04	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1 <1	<1	<0.5	<50
		041119-21-MW-2-P	11/19/04	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1		<1	<0.5	<50
		050225-21-MW-2-P	02/25/05	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5 <0.5	<50
		050526-21-MW-2-P	05/26/05	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - Fuel Constituents Convenience Acquisition Company, More For Less Store #21 940 Petrified Forest Road; Calistoga, California

Well Name	Screened Interval (ft bgs)	Sample Name	Date	MTBE (µg/L)	TPH- Gasoline (µg/L)	TPH- Diesel (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TBA (μg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (μg/L)	EDB (μg/L)	Ethanol (µg/L)
MW-3	5 - 20	14/168/MW-3	11/19/01	22	<50	<50	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	na
		21/168/MW-3 Dry 011112-21-MW-3-P	03/28/02 08/15/02 11/12/02	1.0 14	<50 <50	<50 <50	<0.50 <0.5	<0.50 <0.5	<0.50 <0.5	<1.0 <1.0	<5.0 <50	<1.0 <1	<0.50 <1	<0.50 <1	<0.50 <1	<0.50 <1	na <100
		030224-21-MW-3-P 030515-21-MW-3-P Dry 031121-21-MW-3-P	02/24/03 05/15/03 08/21/03 11/21/03	<1 <1 <0.5	<50 <50 72	<50 <50 <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<1.0 <1.0 <1.0	<50 <50 <10	<1 <1 <0.5	<1 <1 <1.0	<1 <1 <1.0	<1 <1 <1	<1 <1 <0.5	<100 <100 <100
		040224-21-MW-3-P 040527-21-MW-3-P Dry 041119-21-MW-3-P	02/24/04 05/27/04 08/24/04 11/19/04	<0.5 <0.5 <0.5	<50 <50 <50	<50 <50 <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<1.0 <1.0 <1.0	<10 <10 <10	<0.5 <0.5 <0.5	<1 <1 <1	<1 <1 <1	<1 <1 <1	<0.5 <0.5 <0.5	<100 <50 <50
		050225-21-MW-3-P 050526-21-MW-3-P	02/25/05 05/26/05	<0.5 <0.5	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 <0.5	<1 <1	<1 <1	<1 <1	<0.5 <0.5	<50 <50

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - Fuel Constituents Convenience Acquisition Company, More For Less Store #21 940 Petrified Forest Road; Calistoga, California

Well Name	Screened Interval (ft bgs)	Sample Name	Date	MTBE (µg/L)	TPH- Gasoline (µg/L)	TPH- Diesel (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TBA (μg/L)	DIPE (μg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (μg/L)	EDB (µg/L)	Ethanol (µg/L)
Wells Ir	nstalled nea	r Current Tank Locati	on (October	2001)													
MW-4	14 - 24	14/168/MW-4	11/19/01	8,900	<5,000	<50	<100	<100	<100	<100	<500	<100	<100	<100	<100	<100	na
		21/168/MW-4 020815-21-MW-4-P 021112-21-MW-4-P	03/28/02 08/15/02 11/12/02	<0.50 196 22,690	<50 82 934	<50 <50 <50	<0.50 2.1 175	<0.50 <0.5 <0.5	<0.50 <0.5 <0.5	<1.0 <1.0 1.6	<5.0 <50 3,140	<1.0 <1 <1	<0.50 <1 <1	<0.50 <1 870	<0.50 <1 <1	<0.50 <1 <1	na <100 <100
		021112-21-MW-4-D	11/12/02-Dup	26,400	967	<50	178	<0.5	<0.5	1.7	3,010	<1	<1	859	<1	<1	<100
		030224-21-MW-4-P 030515-21-MW-4-P 030821-21-MW-4-P 031121-21-MW-4-P	02/24/03 05/15/03 08/21/03 11/21/03	<1 <1 <1 1,970	<50 <50 62 181	<50 <50 <50 <50	<0.5 <0.5 0.6 33.9	<0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5	<1.0 <1.0 1.5 U <1.0	<50 <50 <50 325	<1 <1 <1 <0.5	<1 <1 <1 <1.0	<1 <1 <1 11	<1 <1 <1 <1	<1 <1 <1 <0.5	<100 <100 <100 <100
		040224-21-MW-4-P 040224-21-MW-4-D	02/24/04 02/24/04-Dup	<0.5 <0.5	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 0.9	<1 <1	<1 <1	<1 <1	<0.5 <0.5	<100 <100
		040527-21-MW-4-P 040527-21-MW-4-D	05/27/04 5/27/04-Dup	<0.5 <0.5	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 <0.5	<1 <1	<1 <1	<1 <1	<0.5 <0.5	<50 <50
		040824-21-MW-4-P	08/24/04	1.6	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50
		041119-21-MW-4-P 041119-21-MW-4-D	11/19/04 11/19/04-Dup	10.7 11.5	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 <0.5	<1 <1	<1 <1	<1 <1	<0.5 <0.5	<50 <50
		050225-21-MW-4-P 050225-21-MW-4-D	02/25/05 2/25/05-Dup	<0.5 <0.5	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 <0.5	<1 <1	<1 <1	<1 <1	<0.5 <0.5	<50 <50
		050526-21-MW-4-P 050526-21-MW-4-D	5/26/05 5/26/05-Dup	<0.5 <0.5	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 <0.5	<1 <1	<1 <1	<1 <1	<0.5 <0.5	<50 <50

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - Fuel Constituents Convenience Acquisition Company, More For Less Store #21 940 Petrified Forest Road; Calistoga, California

Well Name	Screened Interval (ft bgs)	Sample Name	Date	MTBE (µg/L)	TPH- Gasoline (µg/L)	TPH- Diesel (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TBA (μg/L)	DIPE (μg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (μg/L)	EDB (μg/L)	Ethanol (µg/L)
MW-5	14 - 24	14/168/MW-5	11/19/01	300	<250	<50	7.5	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	na
		21/168/MW-5	03/28/02	0.51	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<1.0	<0.50	<0.50	<0.50	<0.50	na
		020815-21-MW-5-P	08/15/02	<1	80	<50	2.3	<0.5	<0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		020815-21-MW-5-D	8/15/02-Dup	<1	114	<50	2.4	1.9	1.2	6.4	<50	<1	<1	<1	<1	<1	<100
		021112-21-MW-5-P	11/12/02	243	62	<50	14	<0.5	<0.5	<1.0	74	<1	<1	7	<1	<1	<100
		030224-21-MW-5-P	02/24/03	<1	<50	<50	<0.5	<0.5	<0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		030515-21-MW-5-P	05/15/03	<1	<50	<50	<0.5	< 0.5	< 0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		030821-21-MW-5-P	08/21/03	<1	<50	<50	<0.5	< 0.5	<0.5	<1.0	<50	<1	<1	<1	<1	<1	<100
		031121-21-MW-5-P	11/21/03	72	100	<50	9.8	<0.5	<0.5	<1.0	<10	<0.5	<1.0	<1.0	<1	<0.5	<100
		040224-21-MW-5-P	02/24/04	< 0.5	<50	<50	<0.5	< 0.5	< 0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<100
		040527-21-MW-5-P	05/27/04	<0.5	<50	<50	<0.5	< 0.5	< 0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50
		040824-21-MW-5-P	08/24/04	<0.5	<50	<50	<0.5	< 0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50
		041119-21-MW-5-P	11/19/04	2	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50
		050225-21-MW-5-P	02/25/05	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50
		050526-21-MW-5-P	05/26/05	<0.5	<50	<50	<0.5	<0.5	<0.5	<1.0	<10	<0.5	<1	<1	<1	<0.5	<50

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - Fuel Constituents Convenience Acquisition Company, More For Less Store #21 940 Petrified Forest Road; Calistoga, California

Well Name	Screened Interval (ft bgs)	Sample Name	Date	MTBE (µg/L)	TPH- Gasoline (µg/L)	TPH- Diesel (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TBA (μg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2- DCA (μg/L)	EDB (μg/L)	Ethanol (μg/L)
MW-6	14 - 24	14/168/MW-6	11/19/01	1,900	<2,500	54 *	<50	<50	<50	<50	<250	<50	<50	<50	<50	<50	na
		21/168/MW-6 020815-21-MW-6-P 021112-21-MW-6-P	03/28/02 08/15/02 11/12/02	0.67 233 13,600	<50 143 219	<50 <50 <50	<0.50 5.4 52.4	<0.50 <0.5 <0.5	<0.50 <0.5 <0.5	<1.0 <1.0 <1.0	<5.0 <50 5,840	<1.0 <1 <1	<0.50 <1 <1	<0.50 <1 208	<0.50 <1 <1	<0.50 <1 <1	na <100 <100
		030224-21-MW-6-P 030224-21-MW-6-D	02/24/03 2/24/03-Dup	4 3	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<50 <50	<1 <1	<1 <1	<1 <1	<1 <1	<1 <1	<100 <100
		030515-21-MW-6-P 030515-21-MW-6-D	05/15/03 5/15/03-Dup	<1 <1	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<50 <50	<1 <1	<1 <1	<1 <1	<1 <1	<1 <1	<100 <100
		030821-21-MW-6-P 030821-21-MW-6-D	08/21/03 8/21/03-Dup	4	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<50 <50	<1 <1	<1 <1	<1 <1	<1 <1	<1 <1	<100 <100
		031121-21-MW-6-P 031121-21-MW-6-D	11/21/03 11/21/03-Dup	250 268	73 78	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 <0.5	<1.0 <1.0	2.9 3.2	<1 <1	<0.5 <0.5	<100 <100
		040224-21-MW-6-P 040527-21-MW-6-P	02/24/04 05/27/04	<0.5 15.9	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 0.6	<1 <1	<1 <1	<1 <1	<0.5 <0.5	<100 <50
		040824-21-MW-6-P 040824-21-MW-6-D	08/24/04 8/24/04-Dup	<0.5 <0.5	<50 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1.0 <1.0	<10 <10	<0.5 <0.5	<1 <1	<1 <1	<1 <1	<0.5 <0.5	<50 <50
		041119-21-MW-6-P 050225-21-MW-6-P 050526-21-MW-6-P	11/19/04 02/25/05 05/26/05	1.3 <0.5 <0.5	<50 <50 <50	<50 <50 <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<1.0 <1.0 <1.0	<10 <10 <10	<0.5 <0.5 <0.5	<1 <1 <1	<1 <1 <1	<1 <1 <1	<0.5 <0.5 <0.5	<50 <50 <50

TBA = Tert-butyl alcohol

DIPE = Di-isopropyl ether

ETBE = Ethyl-tert-butyl ether

TAME = Tert-amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

EDB = Ethylene dibromide

NOTES:

MTBE = Methyl-tert-butyl ether

TPH = Total petroleum hydrocarbons, analyzed using EPA Method 8015M.

Total Xylenes = o-xylene, m-xylene and p-xylene

(ft bgs) = feet below ground surface

 $(\mu g/L)$ = micrograms per liter, or parts per billion

<xx = Analyte not detected above the indicated value</p>

na = not analyzed

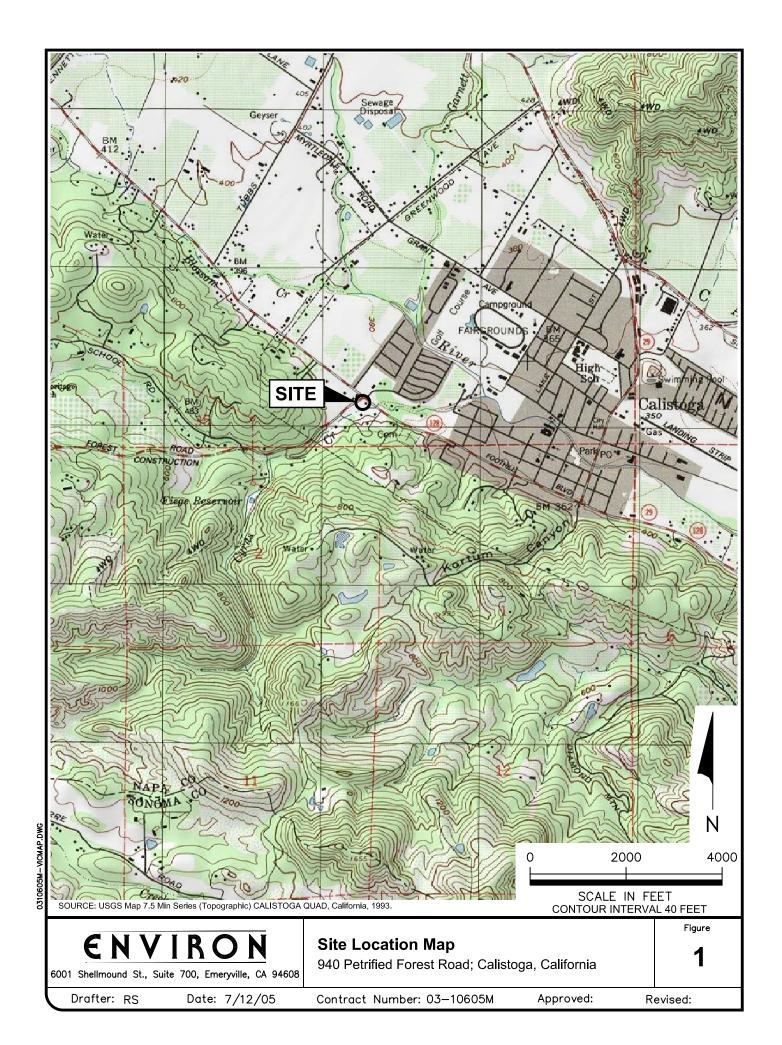
* = For this result, the laboratory indicated that the hydrocarbon reported did not match the pattern of their diesel standard.

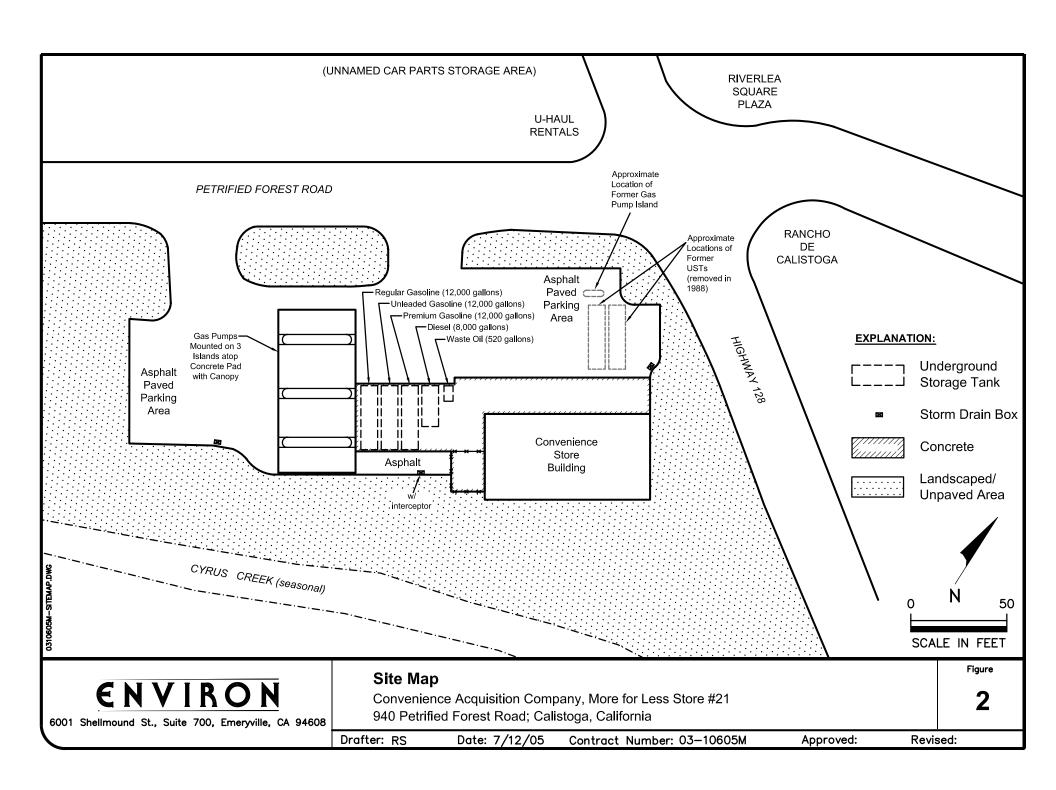
Groundwater samples were collected on 11/19/01 and 3/28/02 by H2O Geol of Livermore, California. Chemical testing was conducted by STL Chromalab of Pleasanton, California. Groundwater samples were collected on 8/15/02, 11/12/02, 2/24/03, 5/15/03, 8/21/03, 11/21/03, 2/24/04, 5/27/04, 8/24/04, 11/19/04, 2/25/05, and 5/26/05 by ENVIRON. Chemical testing was conducted by North State Environmental Laboratory of South San Francisco, California.

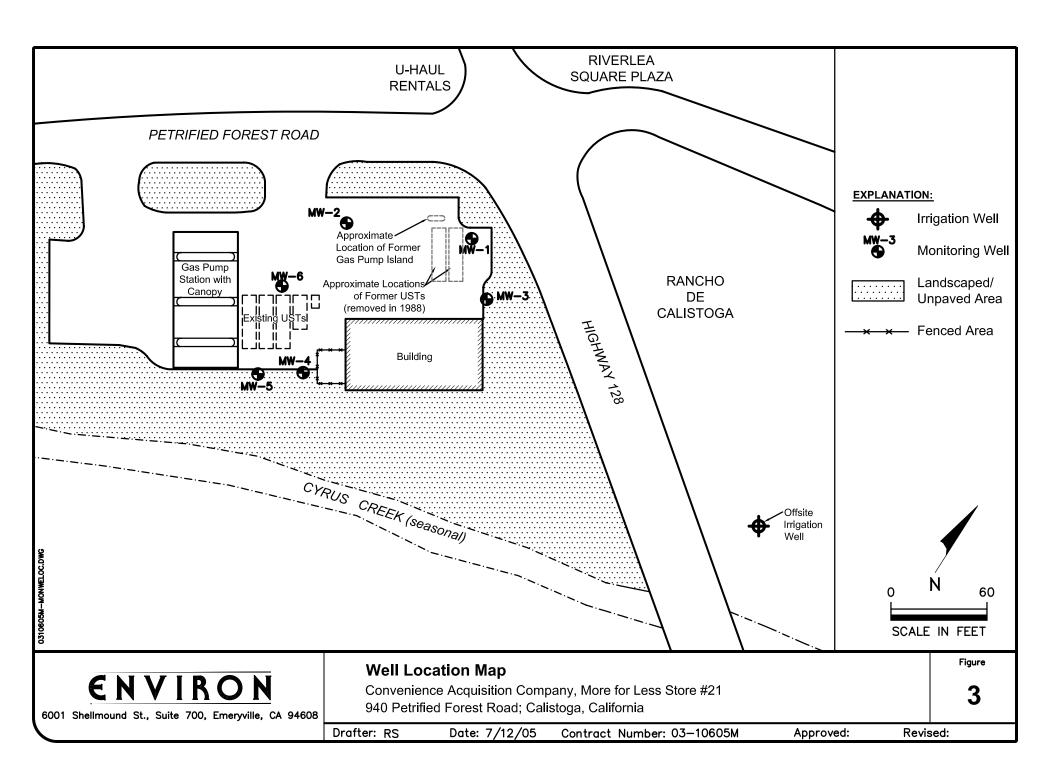
Results above California and federal Maximum Contaminant Levels (MCLs) for drinking water are shown in bold.

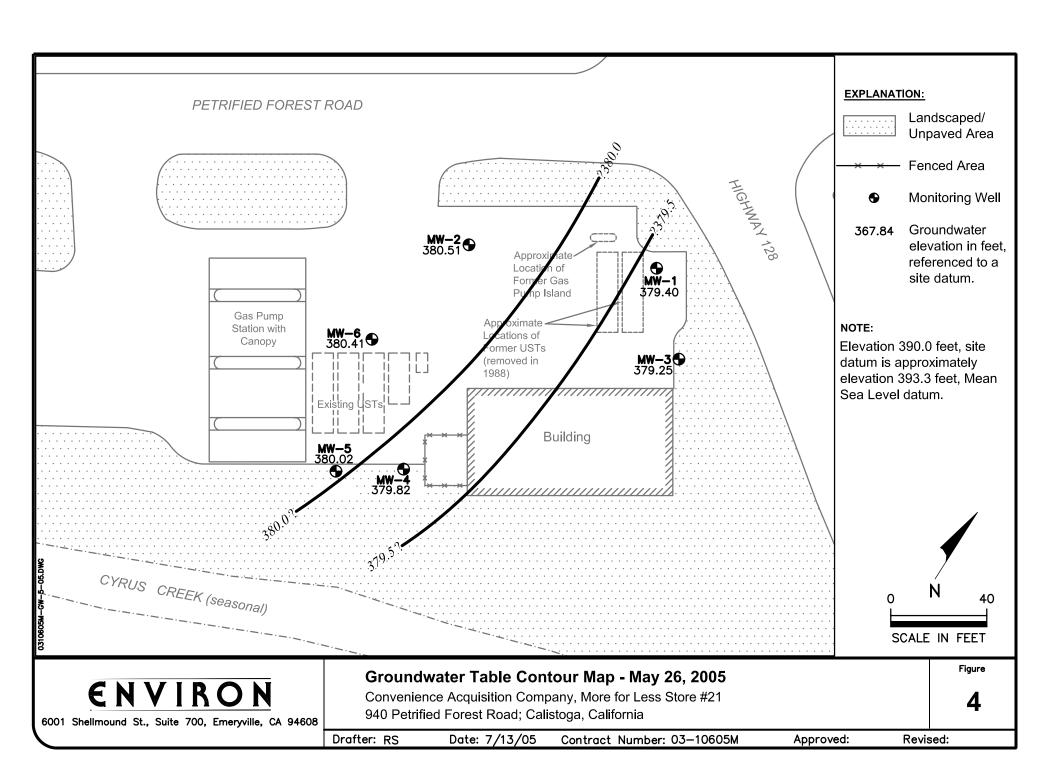
[&]quot;--" indicates data not available because wells MW-1 and MW-3 were dry on August 15, 2002, August 21, 2003 and August 24, 2004 and therefore could not be sampled.

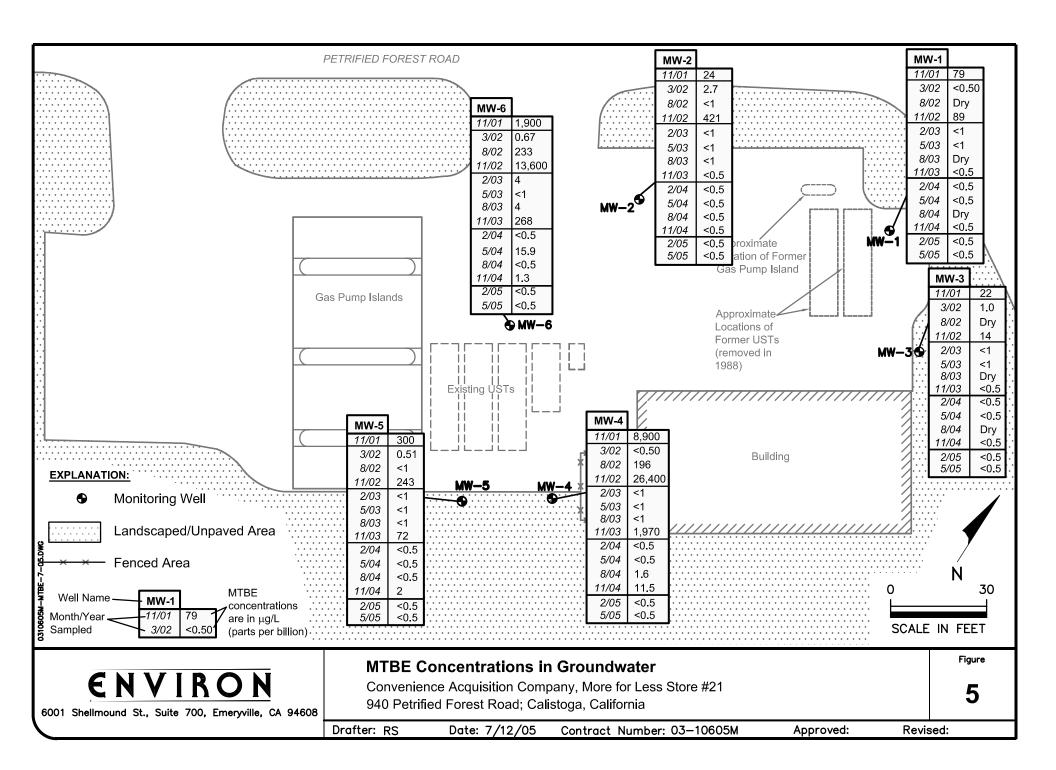
[&]quot;U" indicates data are qualified due to a detection in an associated equipment blank (1.5U means <1.5 µg/L).











APPENDIX A

Field Documentation Water Purging and Sampling Logs

ENVIRO"

PRELIMINARY FIELD DRAFT REVIEW PENDING

WATER PURGING AND SAMPLING LOG

			WELL NO:		·-/
PROJECT NAME	Mare 4 1088 #	2/	SAMPLING	DATE 5/	14/05
CONTRACT NUMBER	031060514		P.M./SAMPI		CR
EQUIPMENT MODEL/T	YPE SERIAL		DATE TEMP BRATED	(°C) STANE	OARD/ACTUAL
PURGING/SAMPLING MET) is placement / D),sp. bai/er	
EQUIPMENT CLEANING M PURGE WATER DISPOSAL	()	Drum	ner		
WELL CASING RAI TOTAL DEPTH (TO DEPTH TO WATER CASING VOLUME	o) OF WELL (ft) (DTW) (ft) (gal) = (TD-DTW) (CF	20.53 2.79 R) ² (.163) =7	7.4 × 3 = 22.2 ATA	 80%=11. 	46
PURGING START TIME	1001		PURGING RATE (gpm)		
TIME/GALLONS SINCE START	TEMP (C')	pН	CONDUCTIVITY (µmhos/cm)	TURBIDITY (NTU)	OTHER
1005 /45	17.1	6.8	120	89	
1011 /9	14.7	6.4	121	148	
1016/13.5	16.6	6.1	12/	47	
1021/18	Me. Lo	<u></u>	/22	27	
1024 /22.5	16.le_	<u>(e./</u>	124	24	
			DTN= 9.9	7	
PURGING STOP TIME	1026		CASING VOLUMES P	JRGED 3	
GALLONS PURGED	22.5		AMPLING TIME		
OBSERVATIONS/COMMEN	TS				

LABORATORY NAME	luth State		SAMPLE I.D. <u>OSOSZ</u>	6-HW1-D	

ENVIRO"

PRELIMINARY FIELD DRAFT REVIEW PENDING

WATER PURGING AND SAMPLING LOG

,			WELL NO:	NW	-2
PROJECT NAME	More 4 hos	3 #2/	SAMPLING I	DATE 5/20	165
CONTRACT NUMBER	031060511		P.M./SAMPLI	ER(S)	<u>e</u>
EQUIPMENT MODEL/T	YPE SERIAL		DATE TEMP (" .IBRATED	C) STANDAF	RD/ACTUAL
URGING/SAMPLING METI QUIPMENT CLEANING M URGE WATER DISPOSAL	ETHOD(S)	sitive Air Steam co	. /	(s) baler	
WELL NUMBER OF WELL CASING RAI TOTAL DEPTH (TD DEPTH TO WATER CASING VOLUME (OIUS (CR) (in)) OF WELL (ft) (DTW) (ft) (gal) = (TD-DTW) (C	4 24.10 8.48	0.2 x3 = 80.5	- - - Ev4 = 11.0 -	, 0
URGING START TIME	1037		PURGING RATE (gpm)	1.0 7pm	
TIME/GALLONS SINCE START	TEMP (C')	pН	CONDUCTIVITY (µmhos/cm)	TURBIDITY (NTU)	OTHER
1043 /5	16.8	<u>Co.7</u>		<u>50</u>	
1049/10	16.5	<u>6.3</u>			
1055/15	16.5	<u> </u>	///	8	
1102 /20	16.4	6.3	111		
1108 /25	16.5	6.3	///		
1114 /305	16.5	6.3			
			DTWZ 8.	6 <u>0</u>	
THE OPIC STOP TIME	1114		CASING VOLUMES PU	RGED 3	
PURGING STOP TIME GALLONS PURGED	30.5	·	SAMPLING TIME		
DBSERVATIONS/COMMEN					
LABORATORY NAME	Varth State		SAMPLE I.D. OSOS	16-HWZ-P	

PRELIMINARY FIELD DRAFT REVIEW PENDING

WATER PURGING AND SAMPLING LOG

PROJECT NAME CONTRACT NUMBER	Mare 4 Less # 03/04/05 M	2/	WELL NO: SAMPLING I P.M./SAMPL		4/05
EQUIPMENT MODEL		DATE CALIBRAT <u>5/2C</u>	TEMP (TED <u>840</u>	\http://	ARD/ACTUAL 4 / 4 0 7 / 7 0 10 / 10 0
PURGING/SAMPLING ME EQUIPMENT CLEANING I PURGE WATER DISPOSAI	THOD Position METHOD(S) 5 Team	5 pc	840 most/ Dis,s	(AM) 3 5,50,50 bailer	700/3900 01/6,52,49 8
WELL CASING RATOTAL DEPTH (TIDEPTH TO WATE	D) OF WELL (ft) R (DTW) (ft) (gal) = (TD-DTW) (CR) ² (9.95	3=2/	- - - - - - -	·/. 22
PURGING START TIME_	922		AC DATE ()	10 -	•
TIME/GALLONS SINCE START 927/4 933/8 937/12 942/16 948/21	TEMP (C') 16.0 16.3 14.4 16.4	pH CO	NG RATE (gpm) NDUCTIVITY (µmhos/cm) 182 127 122 123 125	7.0 9pm TURBIDITY (NTU) 333 21 17 11 10 = 11,11	OTHER
PURGING STOP TIME GALLONS PURGED OBSERVATIONS/COMMEN		SAMPLI	VOLUMES PUR	955	
LABORATORY NAME <u>L</u>	with store	SAMPLE	E I.D. <u>4505</u> 20	L-MW3-P	

PRELIMINARY FIELD DRAFT REVIEW PENDING

WATER PURGING AND SAMPLING LOG

			WE	LL NO:	Murd
PROJECT NAME	More 4 to	28 #2/	SAN	MPLING DATE	5/26/05
CONTRACT NUMBER	_03/060	5 M	P.M	:/SAMPLER(S)	CK
EQUIPMENT MODEL/TY	PE SERI	AL NO.	DATE CALIBRATED	TEMP (°C)	STANDARD/ACTUAL
Sce NW-3				-	
PURGING/SAMPLING METHO EQUIPMENT CLEANING MET PURGE WATER DISPOSAL M	THOD(S)		Displacement,	/ Disp. bah	
WELL NUMBER OR S WELL CASING RADIO TOTAL DEPTH (TD) O DEPTH TO WATER (E CASING VOLUME (ga	JS (CR) (in) OF WELL (ft) OTW) (ft)	2 24.36 8.72 (CR) ² (.163) =	2.5 X3 =	7.5	% = 11. BY
		PURGIN	G DATA		.
PURGING START TIME/	209		PURGING RA	TE (gpm)	TOM
TIME/GALLONS SINCE START	TEMP (C')	pН	CONDUC (µmhos		
12/2/2	15.8	6-4	96.0	00 <u>8</u> 0	Ce
1214 /4	15.0	<u>Ce.4</u>	<u> </u>		
1210/6	14.4	6.4	<u>96.2</u> 96.18		
			-		
PURGING STOP TIME	1718				o .
GALLONS PURGED	7.5			MES PURGED	3
OBSERVATIONS/COMMENTS			SAMPLING TI	ME	
LABORATORY NAME North	State		CAMPIE		
NOW!	JMC			050526-HWH	

PRELIMINARY FIELD DRAFT REVIEW PENDING

WATER PURGING AND SAMPLING LOG

			WELL	NO:	Mw5
PROJECT NAME	Mare 4 les		_ SAMPI	LING DATE	5/24/05
CONTRACT NUMBER	03/06051	<u>u</u>	P.M./SA	AMPLER(S)	CR
EQUIPMENT MODEL/TY	PE SERIA		DATE 7 ALIBRATED	ГЕМР (°С)	STANDARD/ACTUAL
PURGING/SAMPLING METH EQUIPMENT CLEANING ME		Postive A	ar Displacement	nt/D,5).	bailor
PURGE WATER DISPOSAL N		Drum			4:
WELL NUMBER OR WELL CASING RADI TOTAL DEPTH (TD) DEPTH TO WATER (CASING VOLUME (g	TUS (CR) (in) OF WELL (ft) DTW) (ft)	2 23.93 8.08		5	%= 11.25 9pm
TIME/GALLONS SINCE START	TEMP (C')	рН	CONDUCTIV (µmhos/cm	ITY TURB	
1159 /2	16.1	Co. Co	99.35	•	·
1201 /4	15.1	4.3	98.54	26.	
1203 /6	14.8	6.3	98.22	109	
105/75	14.4	6.3	98.10	101	
PURGING STOP TIME GALLONS PURGED OBSERVATIONS/COMMENTS	1205		CASING VOLUME SAMPLING TIME	ES PURGED	3
		V			
LABORATORY NAME No.	th State		SAMPLE I.D.	05260-HAUS-1	۵

PRELIMINARY FIELD DRAFT REVIEW PENDING

WATER PURGING AND SAMPLING LOG

			WELL NO	: .	MWG		
PROJECT NAME	Hore 46	088 42/	SAMPLING	G DATE	_5/265		
CONTRACT NUMBER	03/060	5M	_ P.M./SAMI	PLER(S)	CK		
EQUIPMENT MODEL/T	YPE SERIA:		DATE TEM ALIBRATED	P (°C) ST	ΓANDARD/ACTUAL		
PURGING/SAMPLING METH	10D y				,		
EQUIPMENT CLEANING MI			Displacement/)	sp. bare			
WELL NUMBER OR WELL CASING RAD TOTAL DEPTH (TD) DEPTH TO WATER CASING VOLUME (§	SAMPLING LOCA FIUS (CR) (in) OF WELL (ft) (DTW) (ft)	24/6 7.55	フ.フェ3 ン 色 DATA PURGING RATE (gpm)	30% = 10.87		
SINCE START 1124 /2 1124 /4 1125 /6 1130 /8	17.7 16.5 16.0 15.7	Co.5 Co.3 Co.2 Co.2	CONDUCTIVITY (\mumhos/cm) \(\lambda \rightarrow \) \(\lambda \rightarrow \rightarrow \) \(\lambda \rightarrow \rightarrow \rightarrow \rightarrow \) \(\lambda \rightarrow	TURBIC (NTU <u>Leck</u> 247 221 217			
PURGING STOP TIME GALLONS PURGED OBSERVATIONS/COMMENTS	//30 		CASING VOLUMES POSAMPLING TIME				
LABORATORY NAME Neve	4 State		SAMPLE I.D0505	We-place-	/>		

WELL GAUGING DATA

Project # <u>050526-801</u>	_ Date _ 5/16/05	Client Environ
Site 940 Petrohed	Fust Rd.	Colstiga

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
Mar!	4					9.19	20.53	16c	
phr 2 phr 3 phr 4 phr 5	4					8.48	24.10		
Mw-3	4					9.04	19.95		
MW4	2					8.72	24.30		
phr-5	2					8.08	23,93		
Mule	2					7.55	24.16		
			,						
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					4				
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Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

APPENDIX B

Analytical Laboratory Report for Onsite Monitoring Wells

Laboratory Report Project Overview

Laboratory: North State Environmental, South San Francisco, CA

Lab Report Number: 05-0796

Project Name: MORE FOR LESS

Work Order Number: 05-0796

Control Sheet Number: T0605500132

Case Narrative

North State Environmental, South San Francisco, CA

Report Date: 06/06/2005 Report Number: 05-0796 Project:

MORE FOR LESS

Order #:

05-0796

Eight water samples were received under chain of custody control and analyzed for diesel and gasoline range organics by method 8015B and fuel oxygenates with BTEX by GC/MS method 8260B. No errors were noted during analysis. All QA/QC sample results met acceptance criteria except the MS/MSD results for 1,1-dichloroethene (spiked sample 05-0796-05); the batch for this compound was accepted by and reported with the LCS/LCSD results.

Approved by: _______ Date: _6/06/0S

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
05-0796	21-MW-1-P	05-0796-01	W	CS	8260FAB	SW5030B	05/26/200	06/02/200	06/03/200	06025OBXW5	1
							5	5	5		
05-0796	21-MW-1-P	05-0796-01	W	CS	CATFH	SW3510	05/26/200	06/01/200	06/02/200	06015TPHDW	1
							5	5	5		
05-0796	21-MW-1-P	05-0796-01	W	CS	SW8020F	SW5030B	05/26/200	06/01/200	06/01/200	06015TPHGW	1
							5	5	5		
05-0796	21-MW-2-P	05-0796-02	W	CS	8260FAB	SW5030B	05/26/200	06/02/200		06025OBXW5	1
							5	5	5		
05-0796	21-MW-2-P	05-0796-02	W	CS	CATFH	SW3510	05/26/200	06/01/200	06/02/200	06015TPHDW	1
							5	5	5		
05-0796	21-MW-2-P	05-0796-02	W	CS	SW8020F	SW5030B	05/26/200	06/01/200	06/01/200	06015TPHGW	1
							5	5	5		
05-0796	21-MW-3-P	05-0796-03	W	CS	8260FAB	SW5030B	05/26/200	06/02/200	06/03/200	06025OBXW5	1
							5	5	5		
05-0796	21-MW-3-P	05-0796-03	W	CS	CATFH	SW3510	05/26/200	06/01/200	06/02/200	06015TPHDW	1
					014/0000	011/2000	5	5	5		
05-0796	21-MW-3-P	05-0796-03	W	CS	SW8020F	SW5030B	05/26/200	06/01/200		06015TPHGW	1
05.0700	04 MW 4 D	05.0700.00	147	00	2000545	014/50000	5	5	5	0000505)//4/5	
05-0796	21-MW-4-D	05-0796-08	W	CS	8260FAB	SW5030B	05/26/200	06/02/200	06/03/200	06025OBXW5	1
05.0700	04 MW 4 D	05 0700 00	147	00	OATELL	011/0540	5	5	5	00045TDUDW	4
05-0796	21-MW-4-D	05-0796-08	W	CS	CATFH	SW3510	05/26/200	06/01/200	06/02/200	06015TPHDW	1
05.0700	04 MW 4 D	05.0700.00	147	00	CMOOOF	CMEODOD	5	5	5	00045TDHOW	4
05-0796	21-MW-4-D	05-0796-08	W	CS	SW8020F	SW5030B	05/26/200 5	06/01/200 5	06/01/200 5	06015TPHGW	1
05-0796	21-MW-4-E	05-0796-06	W	CC	8260FAB	SW5030B	05/26/200	06/02/200	-	06025OBXW5	1
05-0796	∠1-WW-4-⊏	05-0796-06	VV	CS	OZOUFAD	34/3030B	5	5	5	06025OBAW5	ı
05-0796	21-MW-4-E	05-0796-06	W	CS	CATFH	SW3510	05/26/200	06/01/200	06/02/200	06015TPHDW	1
03-0790	21-WW-4-L	03-0790-00	VV	CS	CATELL	3443310	5	5	5	000131711000	ı
05-0796	21-MW-4-E	05-0796-06	W	cs	SW8020F	SW5030B	05/26/200	06/01/200	06/01/200	06015TPHGW	1
00 07 00	ZI WWW 4 L	00 07 00 00	••	00	01100201	OWOOOD	5	5	5	000101111011	•
05-0796	21-MW-4-P	05-0796-07	W	cs	8260FAB	SW5030B	05/26/200	06/02/200	06/03/200	06025OBXW5	1
00 07 00	21 10100 41	00 07 00 07	••	00	02001 /\B	OWOOOD	5	5	5	000200BXW0	•
05-0796	21-MW-4-P	05-0796-07	W	CS	CATFH	SW3510	05/26/200	06/01/200		06015TPHDW	1
00 07 00	21	00 07 00 07	••	00	0/11/11	0110010	5	5	5	000101111211	•
05-0796	21-MW-4-P	05-0796-07	W	CS	SW8020F	SW5030B				06015TPHGW	1
							5	5	5		•
05-0796	21-MW-5-P	05-0796-05	W	cs	8260FAB	SW5030B	05/26/200			06025OBXW5	1
	-						5	5	5		
05-0796	21-MW-5-P	05-0796-05	W	CS	CATFH	SW3510	05/26/200			06015TPHDW	1
	-			-			5	5	5		
05-0796	21-MW-5-P	05-0796-05	W	CS	SW8020F	SW5030B				06015TPHGW	1
•	-			-							

Report Summary

_abreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
							5	5	5		
5-0796	21-MW-6-P	05-0796-04	W	CS	8260FAB	SW5030B	05/26/200	06/02/200	06/03/200	06025OBXW5	1
							5	5	5		
05-0796	21-MW-6-P	05-0796-04	W	CS	CATFH	SW3510	05/26/200	06/01/200	06/02/200	06015TPHDW	1
							5	5	5		
)5-0796	21-MW-6-P	05-0796-04	W	CS	SW8020F	SW5030B	05/26/200	06/01/200	06/01/200	06015TPHGW	1
							5	5	5		
		05-0796-05	W	NC	8260FAB	SW5030B	/ /	06/02/200	06/03/200	06025OBXW5	1
		1.000	10/	DD4	0000545	CMEOOOD	1.1	5	5	000000000000000000000000000000000000000	4
		LCSD	W	BUI	8260FAB	SW5030B	/ /	06/02/200 5	06/03/200 5	06025OBXW5	1
		LCS	W	DC1	8260FAB	SW5030B	/ /	06/02/200	06/03/200	06025OBXW5	1
		LOO	VV	DOT	02001 AD	3443030D	, ,	5	5	000230BXVV3	'
		BLK	W	IB1	8260FAB	SW5030B	/ /	05/20/200	06/02/200	06025OBXW5	1
		22.1			0200.7.2	000002	, ,	5	5	0002002/1110	·
		BLK	W	LB1	SW8020F	SW5030B	/ /	06/01/200	06/01/200	06015TPHGW	1
								5	5		
		WBLK	W	LB1	CATFH	SW3510	//	06/01/200	06/01/200	06015TPHDW	1
								5	5		
		0796-05 MS	W	MS1	8260FAB	SW5030B	/ /	06/02/200	06/03/200	06025OBXW5	1
								5	5		
		0796-05 MS	W	MS1	CATFH	SW3510	/ /	06/01/200	06/02/200	06015TPHDW	1
								5	5		
		0796-05 MS	W	MS1	SW8020F	SW5030B	/ /	06/01/200	06/01/200	06015TPHGW	1
							5	5			
	0796-05 MSD	W	SD1	8260FAB	SW5030B	/ /	06/02/200	06/03/200	06025OBXW5	1	
							5	5			
		0796-05 MSD	W	SD1	CATFH	SW3510	/ /	06/01/200	06/02/200	06015TPHDW	1
		0700 05 1105	147	004	014/00005	014/50005		5	5	00045TDUG	
	0796-05 MSD	W	SD1	SW8020F	SW5030B	/ /	06/01/200	06/01/200	06015TPHGW	1	

	-
Project Name: MORE FOR LES Project No: 05-0796	Analysis: VOCs by GC/MS Fuel Additives Plus BTEX Method: 8260FAB Prep Meth: SW5030B
Field ID: 21-MW-1-P	Lab Samp ID: 05-0796-01
Descr/Location: MW-1	Rec'd Date: 05/27/2005
Sample Date: 05/26/2005	Prep Date: 06/02/2005
Sample Time: 1025	Analysis Date: 06/03/2005
Matrix: Water	QC Batch: 06025OBXW5
Basis: Wet	Notes:
Analyte	Det Limit Rep Limit Note Result Units Pvc Dil
Methyl-tert-butyl ether (MTBE)	0.191 0.5 PQL ND UG/L 1
Ethyl tert-butyl ether (ETBE)	0.214 1. PQL ND UG/L 1
tert-Amyl methyl ether (TAME)	0.209 1. PQL ND UG/L 1
Di-isopropyl ether (DIPE)	0.197 0.5 PQL ND UG/L 1
tert-Butyl alcohol (TBA)	3.910 10. PQL ND UG/L 1
1,2-Dichloroethane	0.250 1. PQL ND UG/L 1
1,2-Dibromoethane	0.123 1. PQL ND UG/L 1
Ethanol (EtOH)	9.731 50. PQL ND UG/L 1
Benzene	0.077 0.5 PQL ND UG/L 1
Toluene	0.199 0.5 PQL ND UG/L 1
Ethylbenzene	0.146 0.5 PQL ND UG/L 1
Xylene, Isomers m & p	0.146 1. PQL ND UG/L 1
o-Xylene	0.256 0.5 PQL ND UG/L 1
SURROGATE AND INTERNAL ST	
4-Bromofluorobenzene	85-115 SLSA 93% 1
Toluene-d8	85-115 SLSA 90% 1
Dibromofluoromethane	85-115 SLSA 98% 1
1,2-Dichloroethane-d4	85-115 SLSA 101% 1

Approved by:	Date:	

Project Name: Project No:	MORE FOR LESS 05-0796		Analys Method Prep M	d: 82	DCs by GC/MS Fu 60FAB N5030B	el Additive	es Plus	ВТЕХ	
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-2-P MW-2 05/26/2005 1115 Water Wet		Rec'd I Prep D	Date: Date: Date: Sis Date: tch:	05-0796-02 05/27/2005 06/02/2005 06/03/2005 06025OBXW5				
Analyte		Det Limit	Rep Limit	t	Note	Result	Units	Pvc Dil	
Methyl-tert-butyl	ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1	
Ethyl tert-butyl et	ther (ETBE)	0.214	1.	PQL		ND	UG/L	1	
tert-Amyl methyl	ether (TAME)	0.209	1.	PQL		ND	UG/L	1	
Di-isopropyl ethe	er (DIPE)	0.197	0.5	PQL		ND	UG/L	1	
tert-Butyl alcohol	(TBA)	3.910	10.	PQL		ND	UG/L	1	
1,2-Dichloroetha	ne	0.250	1.	PQL		ND	UG/L	1	
1,2-Dibromoetha	ne	0.123	1.	PQL		ND	UG/L	1	
Ethanol (EtOH)		9.731	50.	PQL		ND	UG/L	1	
Benzene		0.077	0.5	PQL		ND	UG/L	1	
Toluene		0.199	0.5	PQL		ND	UG/L	1	
Ethylbenzene		0.146	0.5	PQL		ND	UG/L	1	
Xylene, Isomers	m & p	0.146	1.	PQL		ND	UG/L	1	
o-Xylene		0.256	0.5	PQL		ND	UG/L	1	
SURROGATE Al 4-Bromofluorobe	ND INTERNAL STAND nzene	ARD RECOV	'ERIES: 85-115	SLSA		101%			1
Toluene-d8			85-115	SLSA		89%			1
Dibromofluorome	ethane		85-115	SLSA		99%			1
1,2-Dichloroetha	ne-d4		85-115	SLSA		106%			1

Approved b	<i>!</i> :	Date:	

Project Name: Project No:	MORE FOR LESS 05-0796		Analys Method Prep M	d: 82	DCs by GC/MS Fu 60FAB N5030B	el Additive	es Plus	ВТЕХ	
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-3-P MW-3 05/26/2005 0955 Water Wet		Rec'd I Prep D	Date: Date: Date: Sis Date: tch:	05-0796-03 05/27/2005 06/02/2005 06/03/2005 06025OBXW5				
Analyte		Det Limit	Rep Limit	t	Note	Result	Units	Pvc Dil	
Methyl-tert-butyl	ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1	
Ethyl tert-butyl et	ther (ETBE)	0.214	1.	PQL		ND	UG/L	1	
tert-Amyl methyl	ether (TAME)	0.209	1.	PQL		ND	UG/L	1	
Di-isopropyl ethe	er (DIPE)	0.197	0.5	PQL		ND	UG/L	1	
tert-Butyl alcohol	(TBA)	3.910	10.	PQL		ND	UG/L	1	
1,2-Dichloroetha	ne	0.250	1.	PQL		ND	UG/L	1	
1,2-Dibromoetha	ne	0.123	1.	PQL		ND	UG/L	1	
Ethanol (EtOH)		9.731	50.	PQL		ND	UG/L	1	
Benzene		0.077	0.5	PQL		ND	UG/L	1	
Toluene		0.199	0.5	PQL		ND	UG/L	1	
Ethylbenzene		0.146	0.5	PQL		ND	UG/L	1	
Xylene, Isomers	m & p	0.146	1.	PQL		ND	UG/L	1	
o-Xylene		0.256	0.5	PQL		ND	UG/L	1	
SURROGATE Al 4-Bromofluorobe	ND INTERNAL STAND nzene	ARD RECOV	'ERIES: 85-115	SLSA		100%			1
Toluene-d8			85-115	SLSA		90%			1
Dibromofluorome	ethane		85-115	SLSA		101%			1
1,2-Dichloroetha	ne-d4		85-115	SLSA		112%			1

Approved by:	Date:	

Project Name: Project No:	MORE FOR LESS 05-0796		Analys Method Prep M	d: 82	DCs by GC/MS Fu 160FAB N5030B	el Additive	es Plus	ВТЕХ	
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-4-D MW-4 05/26/2005 1238 Water Wet		Rec'd I Prep D	Date: Date: Date: Sis Date: tch:	05-0796-08 05/27/2005 06/02/2005 06/03/2005 06025OBXW5				
Analyte		Det Limit	Rep Limit	t	Note	Result	Units	Pvc Dil	
Methyl-tert-butyl	ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1	
Ethyl tert-butyl et	ther (ETBE)	0.214	1.	PQL		ND	UG/L	1	
tert-Amyl methyl	ether (TAME)	0.209	1.	PQL		ND	UG/L	1	
Di-isopropyl ethe	er (DIPE)	0.197	0.5	PQL		ND	UG/L	1	
tert-Butyl alcohol	(TBA)	3.910	10.	PQL		ND	UG/L	1	
1,2-Dichloroetha	ne	0.250	1.	PQL		ND	UG/L	1	
1,2-Dibromoetha	ne	0.123	1.	PQL		ND	UG/L	1	
Ethanol (EtOH)		9.731	50.	PQL		ND	UG/L	1	
Benzene		0.077	0.5	PQL		ND	UG/L	1	
Toluene		0.199	0.5	PQL		ND	UG/L	1	
Ethylbenzene		0.146	0.5	PQL		ND	UG/L	1	
Xylene, Isomers	m & p	0.146	1.	PQL		ND	UG/L	1	
o-Xylene		0.256	0.5	PQL		ND	UG/L	1	
SURROGATE Al 4-Bromofluorobe	ND INTERNAL STAND nzene	ARD RECOV	'ERIES: 85-115	SLSA		96%			1
Toluene-d8			85-115	SLSA		86%			1
Dibromofluorome	ethane		85-115	SLSA		111%			1
1,2-Dichloroetha	ne-d4		85-115	SLSA		111%			1

Approved by:	Date:	
AUDIOVED DV	Dale	

Project Name: MORE FOR LESS Project No: 05-0796		Analys Method Prep M	d: 82	DCs by GC/MS Fu 60FAB N5030B	uel Additive	es Plus l	BTEX	
Field ID: 21-MW-4-P		Lab Sa	amp ID:	05-0796-07				
Descr/Location: MW-4		Rec'd I	Date:	05/27/2005				
Sample Date: 05/26/2005		Prep D	ate:	06/02/2005				
Sample Time: 1235		•		06/03/2005				
Matrix: Water		QC Ba		06025OBXW5				
Basis: Wet		Notes:						
Analyte	Det Limit	Rep Limit	:	Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1	
Ethyl tert-butyl ether (ETBE)	0.214	1.	PQL		ND	UG/L	1	
tert-Amyl methyl ether (TAME)	0.209	1.	PQL		ND	UG/L	1	
Di-isopropyl ether (DIPE)	0.197	0.5	PQL		ND	UG/L	1	
tert-Butyl alcohol (TBA)	3.910	10.	PQL		ND	UG/L	1	
1,2-Dichloroethane	0.250	1.	PQL		ND	UG/L	1	
1,2-Dibromoethane	0.123	1.	PQL		ND	UG/L	1	
Ethanol (EtOH)	9.731	50.	PQL		ND	UG/L	1	
Benzene	0.077	0.5	PQL		ND	UG/L	1	
Toluene	0.199	0.5	PQL		ND	UG/L	1	
Ethylbenzene	0.146	0.5	PQL		ND	UG/L	1	
Xylene, Isomers m & p	0.146	1.	PQL		ND	UG/L	1	
o-Xylene	0.256	0.5	PQL		ND	UG/L	1	
SURROGATE AND INTERNAL STAND	DARD RECOV							
4-Bromofluorobenzene		85-115	SLSA		93%			1
Toluene-d8		85-115	SLSA		90%			1
Dibromofluoromethane		85-115	SLSA		106%			1
1,2-Dichloroethane-d4		85-115	SLSA		108%			1

Approved by:	Date:	

Project Name: MORE FOR LESS Project No: 05-0796		Analys Method Prep M	d: 82	DCs by GC/MS Fu 60FAB N5030B	el Additive	es Plus l	BTEX	
Field ID: 21-MW-5-P		Lab Sa	amp ID:	05-0796-05				
Descr/Location: MW-5		Rec'd I	Date:	05/27/2005				
Sample Date: 05/26/2005		Prep D		06/02/2005				
Sample Time: 1210		•		06/03/2005				
Matrix: Water		QC Ba		06025OBXW5				
Basis: Wet		Notes:						
Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1	
Ethyl tert-butyl ether (ETBE)	0.214	1.	PQL		ND	UG/L	1	
tert-Amyl methyl ether (TAME)	0.209	1.	PQL		ND	UG/L	1	
Di-isopropyl ether (DIPE)	0.197	0.5	PQL		ND	UG/L	1	
tert-Butyl alcohol (TBA)	3.910	10.	PQL		ND	UG/L	1	
1,2-Dichloroethane	0.250	1.	PQL		ND	UG/L	1	
1,2-Dibromoethane	0.123	1.	PQL		ND	UG/L	1	
Ethanol (EtOH)	9.731	50.	PQL		ND	UG/L	1	
Benzene	0.077	0.5	PQL		ND	UG/L	1	
Toluene	0.199	0.5	PQL		ND	UG/L	1	
Ethylbenzene	0.146	0.5	PQL		ND	UG/L	1	
Xylene, Isomers m & p	0.146	1.	PQL		ND	UG/L	1	
o-Xylene	0.256	0.5	PQL		ND	UG/L	1	
SURROGATE AND INTERNAL STAND	OARD RECOV							
4-Bromofluorobenzene		85-115	SLSA		92%			1
Toluene-d8		85-115	SLSA		90%			1
Dibromofluoromethane		85-115	SLSA		109%			1
1,2-Dichloroethane-d4		85-115	SLSA		110%			1

Approved b	V:	Date:	

Project Name: MORE FOR LESS Project No: 05-0796		Analys Method Prep M	d: 82	DCs by GC/MS Fu 60FAB W5030B	uel Additive	es Plus l	BTEX	
Field ID: 21-MW-6-P Descr/Location: MW-6 Sample Date: 05/26/2005 Sample Time: 1135 Matrix: Water Basis: Wet		Rec'd I Prep D	Date: Date: Sis Date: tch:	05-0796-04 05/27/2005 06/02/2005 06/03/2005 06025OBXW5				
Analyte	Det Limit	Rep Limit	t	Note	Result	Units	Pvc Dil	
Methyl-tert-butyl ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1	
Ethyl tert-butyl ether (ETBE)	0.214	1.	PQL		ND	UG/L	1	
tert-Amyl methyl ether (TAME)	0.209	1.	PQL		ND	UG/L	1	
Di-isopropyl ether (DIPE)	0.197	0.5	PQL		ND	UG/L	1	
tert-Butyl alcohol (TBA)	3.910	10.	PQL		ND	UG/L	1	
1,2-Dichloroethane	0.250	1.	PQL		ND	UG/L	1	
1,2-Dibromoethane	0.123	1.	PQL		ND	UG/L	1	
Ethanol (EtOH)	9.731	50.	PQL		ND	UG/L	1	
Benzene	0.077	0.5	PQL		ND	UG/L	1	
Toluene	0.199	0.5	PQL		ND	UG/L	1	
Ethylbenzene	0.146	0.5	PQL		ND	UG/L	1	
Xylene, Isomers m & p	0.146	1.	PQL		ND	UG/L	1	
o-Xylene	0.256	0.5	PQL		ND	UG/L	1	
SURROGATE AND INTERNAL STANI	DARD RECOV							
4-Bromofluorobenzene		85-115	SLSA		101%			1
Toluene-d8		85-115	SLSA		90%			1
Dibromofluoromethane		85-115	SLSA		100%			1
1,2-Dichloroethane-d4		85-115	SLSA		109%			1

Approved by:	Date:	

Project Name: Project No:	MORE FOR LESS 05-0796		Analys Method Prep M	d: 82	DCs by GC/MS Fu 60FAB N5030B	el Additive	es Plus	ВТЕХ	
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-4-E QCEB-4 05/26/2005 1205 Water Wet		Rec'd I Prep D	Date: Date: Date: Sis Date: tch:	05-0796-06 05/27/2005 06/02/2005 06/03/2005 06025OBXW5				
Analyte		Det Limit	Rep Limit	t	Note	Result	Units	Pvc Dil	
Methyl-tert-butyl	ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1	
Ethyl tert-butyl et	ther (ETBE)	0.214	1.	PQL		ND	UG/L	1	
tert-Amyl methyl	ether (TAME)	0.209	1.	PQL		ND	UG/L	1	
Di-isopropyl ethe	er (DIPE)	0.197	0.5	PQL		ND	UG/L	1	
tert-Butyl alcohol	(TBA)	3.910	10.	PQL		ND	UG/L	1	
1,2-Dichloroetha	ne	0.250	1.	PQL		ND	UG/L	1	
1,2-Dibromoetha	ne	0.123	1.	PQL		ND	UG/L	1	
Ethanol (EtOH)		9.731	50.	PQL		ND	UG/L	1	
Benzene		0.077	0.5	PQL		ND	UG/L	1	
Toluene		0.199	0.5	PQL		ND	UG/L	1	
Ethylbenzene		0.146	0.5	PQL		ND	UG/L	1	
Xylene, Isomers	m & p	0.146	1.	PQL		ND	UG/L	1	
o-Xylene		0.256	0.5	PQL		ND	UG/L	1	
SURROGATE Al 4-Bromofluorobe	ND INTERNAL STAND nzene	ARD RECOV	'ERIES: 85-115	SLSA		103%			1
Toluene-d8			85-115	SLSA		89%			1
Dibromofluorome	ethane		85-115	SLSA		103%			1
1,2-Dichloroetha	ne-d4		85-115	SLSA		114%			1

Approved by:	Date:	
AUDIOVED DV	Dale	

Project Name: Project No:	MORE FOR LESS 05-0796		•	CA LUFT Method fo CATFH SW3510	r Total Fu	el Hydro	ocarbons
Field ID:	21-MW-1-P		Lab Samp II	D: 05-0796-01			
Descr/Location:	MW-1		Rec'd Date:	05/27/2005			
Sample Date:	05/26/2005		Prep Date:	06/01/2005			
Sample Time:	1025		Analysis Da	te: 06/02/2005			
Matrix:	Water		QC Batch:	06015TPHDW			
Basis:	Wet		Notes:				
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05 PQI	_	ND	MG/L	1

Project Name: Project No:	MORE FOR LESS 05-0796		•	CA LUFT Method fo CATFH SW3510	r Total Fu	el Hydro	ocarbons
Field ID:	21-MW-2-P		Lab Samp II	D: 05-0796-02			
Descr/Location:	MW-2		Rec'd Date:	05/27/2005			
Sample Date:	05/26/2005		Prep Date:	06/01/2005			
Sample Time:	1115		Analysis Da	te: 06/02/2005			
Matrix:	Water		QC Batch:	06015TPHDW			
Basis:	Wet		Notes:				
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05 PQL	-	ND	MG/L	1

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Project Name: Project No:	MORE FOR LESS 05-0796		•	CA LUFT Method fo CATFH SW3510	or Total Fu	el Hydro	ocarbons
Field ID: Descr/Location: Sample Date: Sample Time:	21-MW-3-P MW-3 05/26/2005 0955		Rec'd Date: Prep Date:	D: 05-0796-03 05/27/2005 06/01/2005 ate: 06/02/2005			
Matrix: Basis:	Water Wet		QC Batch: Notes:				
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05 PQ	L	ND	MG/L	1

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 12

Project Name: Project No:	MORE FOR LESS 05-0796		Analysis Method: Prep Me	CA	A LUFT Method for ATFH W3510	r Total Fu	el Hydro	carbons
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-4-D MW-4 05/26/2005 1238 Water Wet		Rec'd D Prep Da	ate: ite: Date:	05-0796-08 05/27/2005 06/01/2005 06/02/2005 06015TPHDW			
Analyte		Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05	PQL	_	ND	MG/L	1

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 13

Project Name: Project No:	MORE FOR LESS 05-0796		Analysis: Method: Prep Met	CA	A LUFT Method for ATFH W3510	r Total Fu	el Hydro	carbons
Field ID: Descr/Location: Sample Date: Sample Time:	21-MW-4-P MW-4 05/26/2005 1235		Rec'd Da Prep Date Analysis	te: e: Date:	05-0796-07 05/27/2005 06/01/2005 06/02/2005			
Matrix: Basis:	Water Wet		QC Batch Notes:	:	06015TPHDW			
Analyte		Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05 F	QL		ND	MG/L	1

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 14

Project Name: Project No:	MORE FOR LESS 05-0796		Analysis Method: Prep Me	CA	A LUFT Method for ATFH W3510	Total Fu	el Hydro	ocarbons
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-5-P MW-5 05/26/2005 1210 Water Wet		Rec'd D Prep Da	ate: ite: Date:	05-0796-05 05/27/2005 06/01/2005 06/02/2005 06015TPHDW			
Analyte		Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05	PQL		ND	MG/L	1

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 15

Project Name: Project No:	MORE FOR LESS 05-0796		,	CA LUFT Method fo CATFH SW3510	or Total Fu	el Hydro	ocarbons
Field ID: Descr/Location: Sample Date:	21-MW-6-P MW-6 05/26/2005		Rec'd Date	D: 05-0796-04 05/27/2005 06/01/2005			
Sample Time: Matrix: Basis:	1135 Water Wet		•	ite: 06/02/2005			
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05 PQ	L	ND	MG/L	1

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 16

Project Name: Project No:	MORE FOR LESS 05-0796		Analysis: Method: Prep Meth	CA	LUFT Method for TFH V3510	· Total Fu	el Hydro	carbons
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-4-E QCEB-4 05/26/2005 1205 Water Wet		Rec'd Date	e: :)ate:	05-0796-06 05/27/2005 06/01/2005 06/02/2005 06015TPHDW			
Analyte		Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05 PC	QL		ND	MG/L	1

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 17

Project Name: Project No:	MORE FOR LESS 05-0796		Analysis: Method: Prep Meth:	SW8020F									
Field ID:	21-MW-1-P		Lab Samp	ID: 05-0796-01									
Descr/Location:	MW-1		Rec'd Date	: 05/27/2005									
Sample Date:	05/26/2005		Prep Date:	06/01/2005									
Sample Time:	1025		Analysis Da	ate: 06/01/2005									
Matrix:	Water		QC Batch:	06015TPHGW									
Basis:	Wet		Notes:										
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil						
Gasoline Range	Organics	13.7	50. PQ	ıL	ND	UG/L	1						

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 18

Project Name: Project No:	MORE FOR LESS 05-0796		Analysis: Method: Prep Meth:	SW8020F								
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-2-P MW-2 05/26/2005 1115 Water Wet		Rec'd Date Prep Date:	D: 05-0796-02 05/27/2005 06/01/2005 ate: 06/01/2005 06015TPHGW								
Analyte Gasoline Range	Organics	Det Limit	Rep Limit	Note L	Result ND	Units UG/L	Pvc Dil					

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Project Name: Project No:	MORE FOR LESS 05-0796	•			TEX/Gasoline Ran W8020F W5030B	ge Organi	ics (SW	8020/8015)
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-3-P MW-3 05/26/2005 0955 Water Wet		Rec'd [Prep D	Date: ate: is Date:	05-0796-03 05/27/2005 06/01/2005 : 06/01/2005 06015TPHGW			
Analyte		Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Gasoline Range	Gasoline Range Organics		50.	PQL		ND	UG/L	1

Project Name: Project No:	MORE FOR LESS 05-0796		ics (SW	8020/8015)			
Field ID:	21-MW-4-D		Lab Samp	ID: 05-0796-08			
Descr/Location:	MW-4		Rec'd Date	: 05/27/2005			
Sample Date:	05/26/2005		Prep Date:	06/01/2005			
Sample Time:	1238		Analysis Da	ate: 06/01/2005			
Matrix:	Water		QC Batch:	06015TPHGW			
Basis:	Wet		Notes:				
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range	Gasoline Range Organics		50. PG)L	ND	UG/L	1

Project Name: Project No:	MORE FOR LESS 05-0796	Analysis: BTEX/Gasoline Range Organics (SW Method: SW8020F Prep Meth: SW5030B					
Field ID:	21-MW-4-P		Lab Samp	ID: 05-0796-07			
Descr/Location:	MW-4		Rec'd Date	: 05/27/2005			
Sample Date:	05/26/2005		Prep Date:	06/01/2005			
Sample Time:	1235		Analysis Da	ate: 06/01/2005			
Matrix:	Water		QC Batch:	06015TPHGW			
Basis:	Wet		Notes:				
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics		13.7	50. PQ	ıL	ND	UG/L	1

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 22

Project Name: Project No:	MORE FOR LESS 05-0796		Analysis: Method: Prep Meth:	SW8020F									
Field ID:	21-MW-5-P		Lab Samp	D: 05-0796-05									
Descr/Location:	MW-5		Rec'd Date	: 05/27/2005									
Sample Date:	05/26/2005		Prep Date:	06/01/2005									
Sample Time:	1210		Analysis Da	ate: 06/01/2005									
Matrix:	Water		QC Batch:	06015TPHGW									
Basis:	Wet		Notes:										
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil						
Gasoline Range	Organics	13.7	50. PQ	L	ND	UG/L	1						

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 23

Project Name: Project No:	MORE FOR LESS 05-0796		Analysis: Method: Prep Meth:	SW8020F									
Field ID:	21-MW-6-P		Lab Samp	ID: 05-0796-04									
Descr/Location:	MW-6		Rec'd Date	: 05/27/2005									
Sample Date:	05/26/2005		Prep Date:	06/01/2005									
Sample Time:	1135		Analysis Da	ate: 06/01/2005									
Matrix:	Water		QC Batch:	06015TPHGW									
Basis:	Wet		Notes:										
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil						
Gasoline Range	Organics	13.7	50. PQ	L	ND	UG/L	1						

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 24

Project Name: Project No:	MORE FOR LESS 05-0796		Analysi Method Prep M	I: S\	ΓEX/Gasoline Ran W8020F W5030B	ge Organi	cs (SW	8020/8015)
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-MW-4-E QCEB-4 05/26/2005 1205 Water Wet		Rec'd D	Date: ate: s Date:	05-0796-06 05/27/2005 06/01/2005 06/01/2005 06015TPHGW			
Analyte Gasoline Range		Det Limit	Rep Limit	PQL	Note	Result ND	Units UG/L	Pvc Dil

QA/QC Report Method Blank Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 25

QC Batch: 06015TPHDW Analysis: CA LUFT Method for Total Fuel

Matrix: Water Method: CATFH
Lab Samp ID: WBLK Prep Meth: SW3510
Analysis Date: 06/01/2005 Prep Date: 06/01/2005

Basis: Wet Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Diesel Fuel #2	0.031	0.05	PQL		ND	MG/L	1	

QA/QC Report Matrix Spike/Duplicate Matrix Spike Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 26

QC Batch: 06015TPHDW

Matrix: Water

Lab Samp ID: 0796-05 MS

Basis: Wet

Project Name: MORE FOR LESS

Project No.: 05-0796 Field ID: 21-MW-5-P

Lab Ref ID: 05-0796-05

Analysis Method		, Campio Campio		Spike Result		% Recoveries		ries		Accept Crite				
Analyte	Method	MS	DMS	Result	MS	DMS	Units		MS	DMS	RPD	% R	ec	RPD
Diesel Fuel #2	CATFH	2.50	2.50	ND	2.48	2.76	MG/L	ww	99.2	110	10	115-64	MSA	25MSP

QA/QC Report Method Blank Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 27

QC Batch: 06015TPHGW Analysis: BTEX/Gasoline Range Organics

Matrix: Water Method: SW8020F Lab Samp ID: BLK Prep Meth: SW5030B Analysis Date: 06/01/2005 Prep Date: 06/01/2005

Basis: Wet Notes:

_ 5,0,0								
Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Gasoline Range Organics	13.7	50.	PQL		ND	UG/L	1	

QA/QC Report Matrix Spike/Duplicate Matrix Spike Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 28

QC Batch: 06015TPHGW

Matrix: Water

Lab Samp ID: 0796-05 MS

Basis: Wet

Project Name: MORE FOR LESS

Project No.: 05-0796 Field ID: 21-MW-5-P

Lab Ref ID: 05-0796-05

	Analysis	Spil	ke Level	Sample	Spike Result		(% Recover		ries	,	Accept Crite	
Analyte	Method	MS	DMS	Result	MS	DMS	Units		MS	DMS	RPD	% Re	ec	RPD
Gasoline Range Organics	SW8020F	1000.	1000.	ND	1030.	957.	UG/L	ww	103	95.7	7.3	130-70	MSA	30MSP

QA/QC Report Method Blank Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 29

QC Batch: 06025OBXW5 Analysis: VOCs by GC/MS Fuel Additives Plus BTEX

Matrix: Water Method: 8260FAB
Lab Samp ID: BLK Prep Meth: SW5030B
Analysis Date: 06/02/2005 Prep Date: 05/20/2005

Basis: Wet		Notes:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Analyte	Det Limit	Rep Limit	t	Note	Result	Units	Pvc Dil
Methyl-tert-butyl ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.214	1.	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.209	1.	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.197	0.5	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	3.910	10.	PQL		ND	UG/L	1
1,2-Dichloroethane	0.250	1.	PQL		ND	UG/L	1
1,2-Dibromoethane	0.123	1.	PQL		ND	UG/L	1
Ethanol (EtOH)	9.731	50.	PQL		ND	UG/L	1
Benzene	0.077	0.5	PQL		ND	UG/L	1
Toluene	0.199	0.5	PQL		ND	UG/L	1
Ethylbenzene	0.146	0.5	PQL		ND	UG/L	1
Chlorobenzene	0.178	1.	PQL		ND	UG/L	1
1,1-Dichloroethene	0.250	0.5	PQL		ND	UG/L	1
Trichloroethene (TCE)	0.293	0.5	PQL		ND	UG/L	1
Xylene, Isomers m & p	0.146	1.	PQL		ND	UG/L	1
o-Xylene	0.256	0.5	PQL		ND	UG/L	1
SURROGATE AND INTERNAL STAN 4-Bromofluorobenzene	NDARD RECOV	ERIES: 85-115	SLSA		100%		
Toluene-d8		85-115	SLSA		89%		
Dibromofluoromethane		85-115	SLSA		92%		
1,2-Dichloroethane-d4		85-115	SLSA		89%		

QA/QC Report Matrix Spike/Duplicate Matrix Spike Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 30

QC Batch: 06025OBXW5

Matrix: Water

Lab Samp ID: 0796-05 MS

Basis: Wet Project Name: MORE FOR LESS

Project No.: 05-0796 Field ID: 21-MW-5-P

Lab Ref ID: 05-0796-05

	Analysis	Spik	ce Level	Sample	Spike	e Result		% F	Recove	eries		Accept Crite	
Analyte	Method	MS	DMS	Result	MS	DMS	Units	MS	DMS	RPD	% R	ec	RPD
Benzene	8260FAB	20.0	20.0	ND	15.9	16.2	UG/L v	w 79.5	81.0	1.9	130-70	MSA	30MSP
Chlorobenzene	8260FAB	20.	20.	ND	19.	19.	UG/L v	w 95.0	95.0	0.00	130-70	MSA	30MSP
Toluene	8260FAB	20.0	20.0	ND	17.3	17.3	UG/L v	w 86.5	86.5	0.00	130-70	MSA	30MSP
Trichloroethene (TCE)	8260FAB	20.0	20.0	ND	18.6	18.5	UG/L v	w 93.0	92.5	0.54	130-70	MSA	30MSP
1,2-Dichloroethane-d4	8260FAB	100.	100.	110.	107.	113.	PERCENT v	w 107	113	5.5	115-85	SLSA	30SLSP
4-Bromofluorobenzene	8260FAB	100.	100.	92.	101.	102.	PERCENT W	w 101	102	0.99	115-85	SLSA	30SLSP
Dibromofluoromethane	8260FAB	100.	100.	109.	101.	113.	PERCENT W	w 101	113	11	115-85	SLSA	30SLSP
Toluene-d8	8260FAB	100.	100.	90.	92.	93.	PERCENT w	w 92.0	93.0	1.1	115-85	SLSA	30SLSP

QA/QC Report Blank Spike/Duplicate Blank Spike Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0796 Date: 06/06/2005 Page: 31

QC Batch: 06025OBXW5

Matrix: Water Lab Samp ID: LCS

	Analysis	Spike	e Level	Spike	Result			% F	Recove	ries	Accepta Criter	
Analyte	Method	LCS	LCD	LCS	LCD	Units		LCS	LCD	RPD	%Rec	RPD
1,1-Dichloroethene	8260FAB	20.0	20.0	16.	16.	UG/L	ww	80.0	80.0	0.00	130-70 MSA	30MSP

Counsel in Health and Environmental Science

POR! COPET ONG! 05-0796 Sheet / Of / 5820 Shellmound St., Suite 700

5820 Shellmound St., Suite 700 Emeryville, California 94608 (510) 655-7400

CHAIN-of-CUSTODY FORM

	PROJECT NAME: MORE FOR LEST CASE NO.: 03-JOLOSM ENVIRON SAMPLE ID.	S COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	D. 4M.	My SES.	The sun that	5 10	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	124		Fie	LOPY	1)5:	5-dag TAT COMMENTS
,	050526-21-MW-1-P	5/26	ape	WATER	6	1025		X	X				MH	1-1		PLEASE FAX É EMAIL
2	050526-21-MW-Z-P	5/20	cga	WATER	6	1115		X	X				Mh	1-2		RESULTS TO CHRW RITCHIE: 510.655.9517
3	050526-21-MW-3-P	5/26	cga	WATER	6	0955		X	X				Mu	/-3		Critchie @environcorp.com
4	050524-21-AW-6-P	5/26	cgz	MATER	6	1/35		X	X				Mn	1-6		GEOTRACKER GLOBAL ID:
5	050526-21-MN-5-P	5/20	cgs	MATER	10	1210	X	X	X				mn	1-5		70685500132
6	050526-21-MW-4-E	5/26	ye	WATER	6	1205		X	X				QC	EB-4		* FUEL OXYGENATES TO
7	050526-21-MW-4-P	5/26	cgr	WATER	6	1235		X	\times				Mn	-4		INCLUDE MTRE, TRA, ETRE, TAME DIPE,
8	050526-21-MW-4-D	5/20	can	WATER	6	1238		X	X				mr	V-4		1,2-DCA, EDB, ETHANOL
	~~~		-	_							OP.	. 5/	26/2			
	TOTAL	X	X	$\times$	52			8	8							

Relinquished by:	
CHRIS ALTUHE CAR	_
COSS Russell	_
ln	

Date:	Time:
5/26/05	1730
5/27/05	1027
5/27/05	1130

F	Received by:	
4	Ross Rusteck	
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<		
	-9	

Company:	Date:	Time:
ENVIRON	5/26/05	1730
NSCABS	5/27/05	1027
NSCABS	5/27/05	130

# **APPENDIX C**

Analytical Laboratory Report for Offsite Irrigation Well Located at 2412 Foothill Boulevard, Calistoga, CA

# Laboratory Report Project Overview

Laboratory: North State Environmental, South San Francisco, CA

Lab Report Number: 05-0797

Project Name: MORE FOR LESS #21

Work Order Number: 05-0797

Control Sheet Number: T0605500132

#### Case Narrative

North State Environmental, South San Francisco, CA

Report Date:

06/06/2005

Report Number: 05-0797

Project:

MORE FOR LESS #21

Order #:

05-0797

One water sample was received under chain of custody control and analyzed for diesel and gasoline range organics by method 8015B and fuel oxygenates with BTEX by GC/MS method 8260B. No errors were noted during analysis. All QA/QC sample results met acceptance criteria.

# **Report Summary**

_abreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
5-0797	21-WSW-1-P	05-0797-01	W	CS	8260FAB	SW5030B	05/23/200	06/06/200	06/06/200	06065OBXW1	1
							5	5	5		
5-0797	21-WSW-1-P	05-0797-01	W	CS	CATFH	SW3510	05/23/200	06/01/200	06/02/200	06015TPHDW	1
							5	5	5		
5-0797	21-WSW-1-P	05-0797-01	W	CS	SW8020F	SW5030B	05/23/200	06/01/200	06/01/200	06015TPHGW	1
							5	5	5		
		05-0797-01	W	NC	8260FAB	SW5030B	/ /	06/06/200	06/06/200	06065OBXW1	1
								5	5		
		BLK	W	LB1	8260FAB	SW5030B	/ /	05/20/200	06/06/200	06065OBXW1	1
								5	5		
		BLK	W	LB1	SW8020F	SW5030B	/ /	06/01/200	06/01/200	06015TPHGW	1
								5	5		
		WBLK	W	LB1	CATFH	SW3510	/ /	06/01/200	06/01/200	06015TPHDW	1
								5	5		
		0797-01 MS	W	MS1	CATFH	SW3510	/ /	06/01/200	06/02/200	06015TPHDW	1
								5	5		
		0797-01 MS	W	MS1	SW8020F	SW5030B	/ /	06/01/200	06/01/200	06015TPHGW	1
								5	5		
		0797-01MS	W	MS1	8260FAB	SW5030B	/ /	06/06/200	06/06/200	06065OBXW1	1
								5	5		
		0797-01 MSD	W	SD1	CATFH	SW3510	/ /	06/01/200	06/02/200	06015TPHDW	1
								5	5		_
		0797-01 MSD	W	SD1	SW8020F	SW5030B	/ /	06/01/200	06/01/200	06015TPHGW	1
						011/=004=		5	5		
		0797-01MSD	W	SD1	8260FAB	SW5030B	/ /	06/06/200	06/06/200	06065OBXW1	1
								5	5		

Project Name: Project No:	MORE FOR LESS #21 05-0797		Analys Method Prep M	d: 82	DCs by GC/MS Fu 60FAB N5030B	el Additive	es Plus	ВТЕХ	
Field ID: Descr/Location: Sample Date: Sample Time: Matrix: Basis:	21-WSW-1-P WSW-1 05/23/2005 1158 Water Wet		Rec'd I Prep D	Date: late: is Date: tch:	05-0797-01 05/27/2005 06/06/2005 06/06/2005 06065OBXW1				
Analyte		Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Methyl-tert-butyl	ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1	
Ethyl tert-butyl et	ther (ETBE)	0.214	1.	PQL		ND	UG/L	1	
tert-Amyl methyl	ether (TAME)	0.209	1.	PQL		ND	UG/L	1	
Di-isopropyl ethe	er (DIPE)	0.197	0.5	PQL		ND	UG/L	1	
tert-Butyl alcohol	I (TBA)	3.910	10.	PQL		ND	UG/L	1	
1,2-Dichloroetha	ne	0.250	1.	PQL		ND	UG/L	1	
1,2-Dibromoetha	ine	0.123	1.	PQL		ND	UG/L	1	
Ethanol (EtOH)		9.731	50.	PQL		ND	UG/L	1	
Benzene		0.077	0.5	PQL		ND	UG/L	1	
Toluene		0.199	0.5	PQL		ND	UG/L	1	
Ethylbenzene		0.146	0.5	PQL		ND	UG/L	1	
Xylene, Isomers	m & p	0.146	1.	PQL		ND	UG/L	1	
o-Xylene		0.256	0.5	PQL		ND	UG/L	11	
SURROGATE Al 4-Bromofluorobe	ND INTERNAL STANDA Inzene	RD RECOV	'ERIES: 85-115	SLSA		96%			
Toluene-d8			85-115	SLSA		89%			
Dibromofluorome	ethane		85-115	SLSA		97%			
1,2-Dichloroetha	ne-d4		85-115	SLSA		98%			

Approved by:	Date:	
AUDIOVED DV	Dale	

Lab Report No.: 05-0797 Date: 06/06/2005 Page: 2

Project Name: Project No:	MORE FOR LESS #2 05-0797	1	•	CA LUFT Method for CATFH CW3510	r Total Fu	el Hydro	ocarbons
Field ID:	21-WSW-1-P		Lab Samp ID	: 05-0797-01			
Descr/Location:	WSW-1		Rec'd Date:	05/27/2005			
Sample Date:	05/23/2005		Prep Date:	06/01/2005			
Sample Time:	1158		Analysis Date	e: 06/02/2005			
Matrix:	Water		QC Batch:	06015TPHDW			
Basis:	Wet		Notes:				
Analyte		Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Diesel Fuel #2		0.031	0.05 PQL		ND	MG/L	1

Lab Report No.: 05-0797 Date: 06/06/2005 Page: 3

Project Name: Project No:	MORE FOR LESS #2 05-0797	1	Analysi Method Prep M	l: S\	BTEX/Gasoline Range Organics (SW8020/80 SW8020F SW5030B							
Field ID:	21-WSW-1-P		Lab Sa	mp ID:	05-0797-01							
Descr/Location:	WSW-1		Rec'd D	ate:	05/27/2005							
Sample Date:	05/23/2005		Prep Da	ate:	06/01/2005							
Sample Time:	1158		Analysi	s Date:	: 06/01/2005							
Matrix:	Water		QC Bat	ch:	06015TPHGW							
Basis:	Wet		Notes:									
Analyte		Det Limit	Rep Limit		Note	Result	Units	Pvc Dil				
Gasoline Range Organics		13.7	50.	PQL		ND	UG/L	1				

# QA/QC Report Method Blank Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0797 Date: 06/06/2005 Page: 4

QC Batch: 06015TPHDW Analysis: CA LUFT Method for Total Fuel

Matrix: Water Method: CATFH
Lab Samp ID: WBLK Prep Meth: SW3510
Analysis Date: 06/01/2005 Prep Date: 06/01/2005

Basis: Wet Notes:

Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil	
Diesel Fuel #2	0.031	0.05	PQL		ND	MG/L	1	

# QA/QC Report Matrix Spike/Duplicate Matrix Spike Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0797 Date: 06/06/2005 Page: 5

QC Batch: 06015TPHDW

Matrix: Water

Lab Samp ID: 0797-01 MS

Basis: Wet

Project Name: MORE FOR LESS #21

Project No.: 05-0797

Field ID: 21-WSW-1-P Lab Ref ID: 05-0797-01

	Analysis	Spike	e Level	Sample	Spike	Result			% R	ecove	ries		Accept Crite	
Analyte	Method	MS	DMS	Result	MS	DMS	Units		MS	DMS	RPD	% R	ec	RPD
Diesel Fuel #2	CATFH	2.50	2.50	ND	2.64	2.82	MG/L	ww	106	113	6.4	115-64	MSA	25MSP

# QA/QC Report Method Blank Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0797 Date: 06/06/2005 Page: 6

QC Batch: 06015TPHGW Analysis: BTEX/Gasoline Range Organics

Matrix: Water Method: SW8020F Lab Samp ID: BLK Prep Meth: SW5030B Analysis Date: 06/01/2005 Prep Date: 06/01/2005

Basis: Wet Notes:

Analyte	Det Limit	Rep Limit	İ	Note	Result	Units	Pvc Dil	
Gasoline Range Organics	13.7	50.	PQL		ND	UG/L	1	

# QA/QC Report Matrix Spike/Duplicate Matrix Spike Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0797 Date: 06/06/2005 Page: 7

QC Batch: 06015TPHGW

Matrix: Water

Lab Samp ID: 0797-01 MS

Basis: Wet

Project Name: MORE FOR LESS #21

Project No.: 05-0797

Field ID: 21-WSW-1-P

Lab Ref ID: 05-0797-01

	Analysis	Spi	ke Level	Sample	Spik	e Result			% R	ecove	ries		Accept Crite	
Analyte	Method	MS	DMS	Result	MS	DMS	Units		MS	DMS	RPD	% R	ec	RPD
Gasoline Range Organics	SW8020F	1000.	1000.	ND	1020.	1080.	UG/L	ww	102	108	5.7	130-70	MSA	30MSP

# QA/QC Report Method Blank Summary

# North State Environmental, South San Francisco, CA

Lab Report No.: 05-0797 Date: 06/06/2005 Page: 8

06065OBXW1 QC Batch: Analysis: VOCs by GC/MS Fuel Additives Plus BTEX

Matrix: Water Method: 8260FAB Lab Samp ID: BLK Prep Meth: SW5030B Analysis Date: 06/06/2005 Prep Date: 05/20/2005

Basis: Wet		Notes:					
Analyte	Det Limit	Rep Limit		Note	Result	Units	Pvc Dil
Methyl-tert-butyl ether (MTBE)	0.191	0.5	PQL		ND	UG/L	1
Ethyl tert-butyl ether (ETBE)	0.214	1.	PQL		ND	UG/L	1
tert-Amyl methyl ether (TAME)	0.209	1.	PQL		ND	UG/L	1
Di-isopropyl ether (DIPE)	0.197	0.5	PQL		ND	UG/L	1
tert-Butyl alcohol (TBA)	3.910	10.	PQL		ND	UG/L	1
1,2-Dichloroethane	0.250	1.	PQL		ND	UG/L	1
1,2-Dibromoethane	0.123	1.	PQL		ND	UG/L	1
Ethanol (EtOH)	9.731	50.	PQL		ND	UG/L	1
Benzene	0.077	0.5	PQL		ND	UG/L	1
Toluene	0.199	0.5	PQL		ND	UG/L	1
Ethylbenzene	0.146	0.5	PQL		ND	UG/L	1
Chlorobenzene	0.178	1.	PQL		ND	UG/L	1
1,1-Dichloroethene	0.250	0.5	PQL		ND	UG/L	1
Trichloroethene (TCE)	0.293	0.5	PQL		ND	UG/L	1
Xylene, Isomers m & p	0.146	1.	PQL		ND	UG/L	1
o-Xylene	0.256	0.5	PQL		ND	UG/L	1
SURROGATE AND INTERNAL STAND	ARD RECOV	ERIES:		•			
4-Bromofluorobenzene		85-115	SLSA		95%		1
Toluene-d8		85-115	SLSA		87%		1
Dibromofluoromethane		85-115	SLSA		98%		1
1,2-Dichloroethane-d4		85-115	SLSA		92%		1

# QA/QC Report Matrix Spike/Duplicate Matrix Spike Summary

North State Environmental, South San Francisco, CA

Lab Report No.: 05-0797 Date: 06/06/2005 Page: 9

QC Batch: 06065OBXW1

Matrix: Water

Lab Samp ID: 0797-01MS

Basis: Wet

Project Name: Lab Generated or Non COE Sample

Project No.: Lab Generated or Non COE Sample

Field ID: Lab Generated or Non COE Sample

Lab Ref ID: 05-0797-01

	Analysis	Spik	e Level	Sample	Spike Result			% R	% Recoveries		Acceptance Criteria		
Analyte	Method	MS	DMS	Result	MS	DMS	Units	MS	DMS	RPD	% R	ec	RPD
1,1-Dichloroethene	8260FAB	20.0	20.0	ND	23.2	23.1	UG/L wv	/ 116	116	0.00	130-70	MSA	30MSP
Benzene	8260FAB	20.0	20.0	ND	17.8	18.2	UG/L wv	/ 89.0	91.0	2.2	130-70	MSA	30MSP
Chlorobenzene	8260FAB	20.	20.	ND	20.	20.	UG/L wv	/ 100	100	0.00	130-70	MSA	30MSP
Toluene	8260FAB	20.0	20.0	ND	17.5	18.1	UG/L wv	87.5	90.5	3.4	130-70	MSA	30MSP
Trichloroethene (TCE)	8260FAB	20.0	20.0	ND	19.5	19.9	UG/L wv	97.5	99.5	2.0	130-70	MSA	30MSP
1,2-Dichloroethane-d4	8260FAB	100.	100.	98.	101.	101.	PERCENT w	/ 101	101	0.00	115-85	SLSA	30SLSP
4-Bromofluorobenzene	8260FAB	100.	100.	96.	96.	98.	PERCENT w	96.0	98.0	2.1	115-85	SLSA	30SLSP
Dibromofluoromethane	8260FAB	100.	100.	97.	96.	96.	PERCENT w	96.0	96.0	0.00	115-85	SLSA	30SLSP
Toluene-d8	8260FAB	100.	100.	89.	89.	89.	PERCENT W	89.0	89.0	0.00	115-85	SLSA	30SLSP

Counsel in Health and Environmental Science

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5820 Shellmound St., Suite 700 (510) 655-7400

	PROJECT NAME:  More for Less #21  CASE NO.: 03-10605 m  ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	C. AM.	The The SES.	.\/		1 10	Solve Solves	1	Jois	/ /P-1		6	5-day TAT COMMENTS
1	050524-21-WSW-1-P	3/26	cza	WATER	10	1158	X	X	X				WS	W-	1		PLEASE FX & EMAIL RESULTS TO CHRIS
-																	RITCHIE: 510.655.9517 Critchie Denvironcop.com
_																	GEOTRAVER GLOBALID
																	706 055 00132
								/5	_								
							0	1/6	56	2/2	5						* FUEL OXYGEN ATES
							0		/	7		\					TO INCLUDE ATBE;
														\			DIPE; 1,2-MA; EDB;
																	STHOL
	TOTAL	X	X	X	10			1	1								

Relinqui	ished by:	000
4115	PITCHIE	CY/C.
Kons	Kurza	M
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Time:
1730
10:27
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Received by:	
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265	

Company:	Date:	Tim
ENGRON	5/26/05	1730
NS CAB!	5/27/03	102
NSCKBS	5/27/5	11